

Office of River Protection  
Tri-Party Agreement  
Project Summary Report  
November 18, 2010



Office of River Protection  
Tri-Party Agreement  
Quarterly Milestone Review Meeting  
November 18, 2010  
9:00 a.m. – 11:30 p.m.

Page	Topic	Leads	Time
3	M-45, -50, -60 Single-Shell Tank Corrective Action	Bob Lober / Joe Caggiano	9:00
6	M-45-00, Complete Closure of All Single-Shell Tank Farms, D-00B-01, -02, -03, -04 - TWRWP Status - Tank in Appendix H Status	Chris Kemp / Jeff Lyon	9:15
15	Interim Stabilization Consent Decree	John Long / Nancy Uziemblo	9:35
16	M-62-40, Tank Waste System Plan	Ron Koll / Dan McDonald	9:45
17	FY 2010 & FY 2011 ORP TPA Cost & Schedule Performance	Janet Diediker / Dan McDonald / Jeff Lyon	9:50
14	Complete Acquisition of New Facilities and Submit Part B Permit Applications - M-90-00 - M-47-00 - M-62-00	Glyn Trenchard / Dan McDonald	10:10
	<b>BREAK</b>		
26	TPA Milestone Statistics	Woody Russell / Dan McDonald / Jeff Lyon	10:20
34	WTP - Immobilization Plant Project M-62-20, M-62-01U, -01V, M-062-49, D-00A-17, D-00A-01	Wahed Abdul / Jeff Trent / Gary Olsen / Dan McDonald	10:30
37	WTP Pretreatment (PT) Facility D-00A-18, -19, -13, -14, -15, 16	Wahed Abdul / Dan McDonald	10:40
40	High-Level Waste (HLW) Facility D-00A-20, -21, 02, 03	Jeff Trent / Dan McDonald	10:50
42	Low-Activity Waste (LAW) Facility D-00A-07, -08, -09	Gary Olsen / Dan McDonald	11:00
45	Analytical Laboratory D-00A-005	Gary Olsen / Dan McDonald	11:10
47	Balance of Facilities (BOF) D-00A-12	Gary Olsen / Dan McDonald	11:20

## **WBS 5.2 Retrieve and Close Single Shell Tanks**

**M-045-58, Submit to Ecology for Review and Approval as an Agreement primary document, a phase 2 CMS Master Work Plan, Due: 12/31/08 Status: Complete.**

Master Work Plan is in the Primary document revision process. ORP transmitted its response to Ecology on August 18, 2010. Ecology extended review of comment responses to October 29, 2010. Ecology requested at the October PMM a two week extension from October 27, 2010.

**M-045-60, Submit to Ecology for review and approval as an Agreement primary document DOE's Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C, Due: 12/31/08, Status: Complete.**

ORP and Ecology continue to meet monthly to identify and manage changes in the workplan. Last meeting October 27, 2010 and covered organic analyses results to date. Agreed to changes are documented via approved meeting minutes entered into TPA administrative record and applicable change requests.

**M-045-92A, DOE and Ecology will establish, no later than March 31, 2010, selection criteria for installation of additional interim barriers at additional WMAs (beyond the T-106 and TY barriers), Due: 3/31/2010, Status: Complete**

**M-045-92B, DOE shall submit to Ecology for approval, a final design and monitoring plan for TY farm interim barrier, Due: 3/31/2010, Status: Complete**

**M-045-92C, Complete Installation of TY farm interim barrier, Due: 9/30/2010, Status: Complete**

**M-045-90, Complete interim barrier demonstration report for the T-106 interim barrier, which report shall include a recommendation and commitment on whether to proceed with additional interim barriers and an evaluation of the barrier's ability to reduce water infiltration that drives migration of subsurface contamination to groundwater, Due: 9/30/2010, Status: Complete**

**M-045-92D, Complete negotiations to schedule the remaining 4 additional barriers, unless DOE and Ecology agree that monitoring data does not support continued installation of interim barriers. Due: 12/31/2010, Status: On Schedule**

If negotiated, complete installation of 4 additional interim barriers at a rate of one per year, with the first being completed by June 30, 2012. Prior to beginning construction and at least one year before construction is to be complete (06/30/2011), DOE will submit to Ecology a final design and monitoring plan for each interim barrier.

**M-045-92E, DOE and Ecology will meet yearly to review the monitoring data, agree to changes in monitoring (if needed) and assess the performance of the demonstration barrier, Due: 12/31/2010, Status: On Schedule**

**M-045-56G, Complete Implementation of Agreed to Interim Measures, Due: 07/31/11, Status: On Schedule**

**M-045-92F, DOE and Ecology will meet yearly to review the monitoring data, agree to changes in monitoring (if needed) and assess the performance of the demonstration barrier, Due: 12/31/2011, Status: On Schedule**

**M-045-61, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 RFI/CMS Report for WMA C, Due: 12/31/14, Status: On Schedule**

**M-045-62, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Corrective Measures Study Report for WMA C, Due: 06/30/2015, Status: On Schedule**

**M-045-92, DOE and Ecology will establish selection criteria for installation of additional interim barriers at additional WMAs (beyond the T-106 and TY barriers), Due: 9/30/2016, Status: On Schedule**

**M-045-59, Control surface water infiltration pathways as needed to control or significantly reduce the likelihood of migration of subsurface contamination to groundwater at the SST WMAs (pending the CMS report, milestone M-45-58, and implementation of other interim corrective measures), Due: TBD, Status: On Schedule**

#### **Significant Past Accomplishments:**

- T-Farm interim barrier monitoring continues; annual monitoring report issued.
- TY Interim Barrier Construction completed. Monitoring initiated.
- Continued direct push characterization in C Farm at various planned locations
- Continued the joint process with Ecology and other regulatory agencies and stakeholders to define the inputs, approaches, assumptions and methods that will be used for development of a performance assessment for Waste Management Area C.
- Completed data analysis of SGE data collection at UPR-86 site in C Farm.
- Continued remediation technology assessments in support of a Corrective Measures Study for WMA C.
- Completed analysis of 3-D SGE survey of SE portion of S farm.
- Continued analysis testing time-domain electromagnetic induction as a means of identifying locations of historical pipeline leaks.
- Completed direct push characterization of western 241-BY farm in support of a potential barrier.
- Initiated 3-D SGE data collection of western 241-BY farm, using depth electrodes placed by direct push.
- Continued design activities for a surface barrier in 241-SX farm.

**Significant Planned Actions in the Next Six Months:**

- Continue direct push campaign in C Farm.
- Initiate direct push campaign in Eastern BY Farm, supporting Interim Barrier Design and Placement.
- Perform resistivity data collection for 3-D SGE characterization of UPR-82 in C Farm.
- Continue remediation technology assessments in support of a Corrective Measures Study for WMA C.
- Process the TPA change with the updates to the WMA C work plan.
- Perform additional updates to WMA C RFI/CMS workplan based on requested changes from Ecology.
- Continue design of interim surface barrier for SX farm.
- Initiate the Data Quality Objective process for the Phase 2 RFI/CMS work plan for waste management area A/AX.

**Issues:**

None

## **SST Retrieval and Closure Program**

**M-045-100, Submit as a primary document a Catch Tank "assumed leak response plan, Due: 12/27/10, Status: On Schedule**

**M-045-101, Submit to Ecology as a primary document a report on all catch tanks and associated pipelines in the SST System Part A, Due: 12/27/10, Status: On Schedule**

**M-045-80, Complete those portions of C-200 Closure Demonstration Plan, Due: 1/31/2011 Status: On Schedule**

**M-045-81, Implement & complete all remaining activities in C-200 Closure Plan and provide a report of the results of those activities, Due: 9/30/2014, Status: On Schedule**

**D-00B-01, Complete Retrieval of Tank Wastes from 10 Remaining SSTs in WMA-C, Due: 9/30/2014, Status: On Schedule**

**D-00B-01A thru J, Submit Tank Retrieval Complete Certification, Due: TBD**

Pursuant to the requirement at IV(B)(5) of the Consent Decree (CD) DOE must submit to Ecology a written certification that DOE has completed retrieval of a tank in accordance with the requirements of Appendix "C", Part 1, of the CD. Tanks currently in retrieval status are C-108, C-109, C-110, C-104, and C-111.

**D-00B-02, Advise Ecology of the 9 SST's from which Waste Will Be Retrieved by 2022, Due: 9/30/2014, Status: On Schedule**

**M-045-82, Submit complete permit mod requests for Tiers 1, 2, & 3 of the SST, Due: 9/30/2015 Status: On Schedule**

**M-045-84, Complete negotiations of TPA interim MS for closure of second WMA, Due: 1/31/2017, Status: On Schedule**

**D-00B-03, Initiate Startup Retrieval in At Least 5 of 9 SSTs in D-00B-02, Due: 12/31/2017, Status: On Schedule**

**M-045-83, Complete the closure of WMA C, Due: 6/30/2019, Status: On Schedule**

**M-045-85, Complete negotiations of TPA interim MS for closure of remaining WMAs, Due: 1/31/2022, Status: On Schedule**

**D-00B-04, Complete Retrieval of Tank Wastes from the 9 SSTs in D-00B-02, Due: 9/30/2022, Status: On Schedule**

**D-00B-04A thru I, Submit Tank Retrieval Complete Certification, Due: TBD**

**M-045-70, Complete waste retrieval from all remaining SSTs, Due: 12/31/2040, Status: On Schedule**

**M-045-00, Complete Closure of all Single Shell Tank Farms, Due: 1/31/2043, Status: On Schedule**

**M-045-86, Submit retrieval data report to Ecology for 19 tanks retrieved, Due: TBD (12 months after retrieval certification), Status: On Schedule**

### TWRWP Status

Tank	TWRWP	Retrieval Technology	Additional Technology	Additional Technology
C-101	RPP-22520	MRS (per 10/7/10 agreement, to be Modified Sluicing)	-	-
C-102	RPP-22393	Modified Sluicing	MS-ITV	-
C-103	RPP-21895	Retrieval Completed		
C-104	RPP-22393	Modified Sluicing	MS-ITV	-
C-105	RPP-22520	MARS-VAC	-	-
C-106		Retrieval Completed		
C-107	RPP-22393	MARS-S		
C-108	RPP-22393	Modified Sluicing	Chemical Dissolution	MS-ITV
C-109	RPP-21895	Modified Sluicing	MS-ITV	-
C-110	RPP-33116	Modified Sluicing	-	-
C-111	RPP-37739	Modified Sluicing	-	-
C-112	RPP-22393	Modified Sluicing	MS-ITV	-

**Significant Past Accomplishments:**

- Continued C-111 modified sluicing retrieval system.
- Completed fabrication and testing of articulated mast system (hydraulic arm) before placement in C-104 and training of personnel.
- Completed removal of long length (Saltwell Screen and Saltwell Pump) equipment from C-107.
- Completed software modifications to the POR-003 exhaust system, interlocking C-107 parameter to the control system.
- Initiated sample analysis of the hard heel material removed from C-110.
- Continued testing of a MARS sluice educator system at Columbia Energy in Pasco and continued construction of the Columbia Test Center for testing of the MARS sluicing system.
- Continued design activities for C-112 sluicing system.
- Completed testing of the Enhanced Reach Sluicing System (ERSS) at the Cold Test Facility.
- Completed testing of the C-107 core cutting system from the mock tank dome at Cold Test North facility.
- Completed testing of the removal of the core and installation of the New Large Riser at the Cold Test North Facility.
- Continued compaction testing for backfill around the New Large Riser at the Cold Test North Facility.

**Significant Planned Activities in the Next Six Months:**

- Obtain C-109 heel samples
- Complete installation of the new large riser in C-107.
- Complete construction of MARs with a sluicing end-effector for C-107 retrieval.
- Initiate construction of C-108 hard heel retrieval system, and start up of retrieval activities.
- Complete C-111 retrieval.
- Complete C-112 design and initiate procurement.
- Install hydraulic arm Articulating Mast System (AMS) into C-104 to aid removal of obstruction underneath slurry pump.
- Resume and complete C-104 retrieval.
- Finish testing of the MARS with the vacuum educator.

**Issues:**

C-106 Closure Plan approval and SST radiological Categorical Notice of Construction (NOC) Phase 3 (closure) and a toxics categorical NOC application are pending completion of the Tank Closure and Waste Management Environmental Impact Statement (EIS) and associated Record of Decision (ROD); forecast completion for the final EIS ROD is in the spring or summer of 2011.



## **Tank in Appendix H. Status - Single Shell Waste Retrieval Criteria**

### **Tank 241-C-106**

#### **Significant Past Accomplishments:**

None

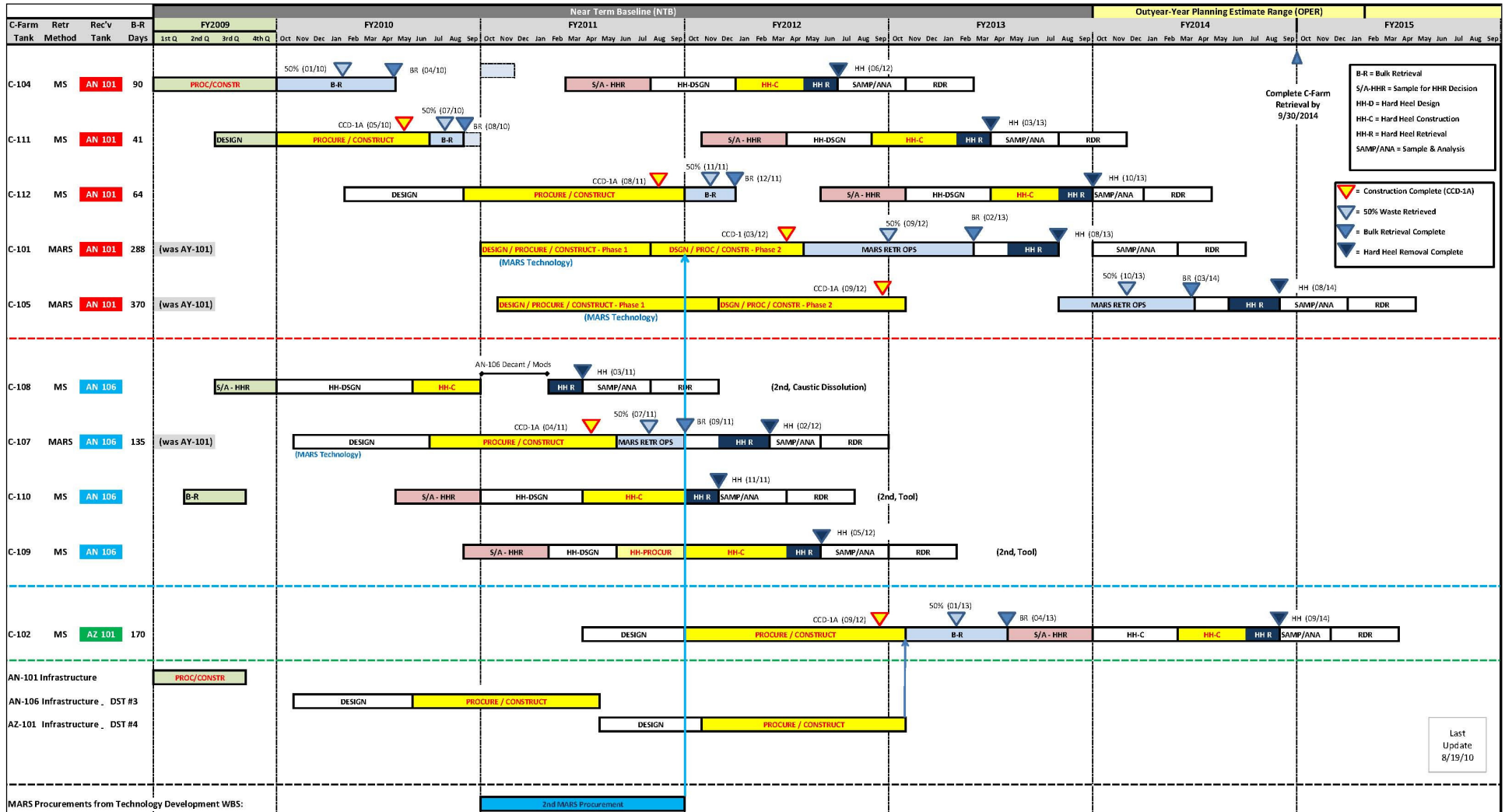
#### **Significant Planned Activities in the Next Six Months:**

- Continue U.S. Nuclear Regulatory Commission (NRC) review of the C-106 exception request. A Request for Additional Information (RAI) was received from the NRC in February 2009. (It has been discussed with the NRC that much of the additional information requested is dependent upon development of C-Farm residual waste PA and, therefore, cannot be provided until the PA is published.)
- Continue PA workshops with Ecology, EPA, NRC, and DOE HQ focused on residual waste in C Farm tanks and pipelines following retrieval.

#### **Issues:**

## C-Farm Life Cycle Baseline 2014 Compliance Schedule

## C-Farm Retrieval Reflects Baseline Schedule (10/01/10)



## **Tank Retrievals with Individual Milestones**

### **Tank 241-S-102**

**M-045-15, Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project**, Due: 6/30/11 Status: At Risk. See discussion below under “Issues”. Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.

**M-045-15A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**, Due: 6/30/11, Status: At risk. See discussion below under “Issues”.

**M-045-15B, Embedded Milestone, Remaining Wastes have been adequately Characterized, and a Risk Assessment has been completed for residuals that remain in the tank**, Due: 6/30/11, Status: At risk. See discussion below under “Issues”.

**M-045-15C, Embedded Milestone, An update to the S-102 Component Closure Activity Plan has been submitted by DOE**, Due: 6/30/11, Status: At risk. See discussion below under “Issues”.

**M-045-15D, Embedded Milestone, if appropriate, DOE has requested an exception to waste retrieval criteria pursuant to Agreement Appendix H**, Due: 6/30/11, Status: At risk.

#### **Significant Past Accomplishments:**

None

#### **Significant Planned Activities in the Next Six Months:**

None

#### **Issues:**

- Retrieval of Tank 241-S-102 was not completed by TPA milestone date of March 31, 2007, due to pump failure. It is technically imprudent to attempt to accelerate retrieval of S-102, at this time, because of the rheological nature of the waste.
- In a letter dated August 15, 2006, Ecology stated that submittal of Component Closure Activity Plans, for retrieved tanks, should continue to be suspended until June 30, 2009, or within 120 days after the Final Tank Closure and Waste Management Environmental Impact Statement (TC&WM EIS) Record Of Decision (ROD) is issued, whichever is earlier. In a letter dated November 12, 2009, Ecology extended its suspension until 180 days after the issuance of the final TC&WM EIS. It is anticipated that the final TC&WM EIS will not be issued until the Spring or Summer of 2011. Submittal of the Closure Plan could not occur, then, until several months after the M-45-15 milestone is due.

**Tank 241-S-112**

**M-045-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project**, Due: TBD (in accordance with M-045-84 or M-045-85), Status: On Schedule

**M-045-13E, Complete Negotiations for Interim Milestones for Closure of S-112**, Due: TBD  
Status: On Schedule as part of M-045-84 and M-045-85.

**Significant Past Accomplishments:**

- Ecology letter of January 7, 2008, concurred with ORP that retrieval of Tank S-112 is complete.

**Significant Planned Activities in the Next Six Months:**

None

**Issues:**

None

## **SST Integrity Assurance**

**M-045-91, Establish panel and provide report on SST integrity assurance review, Due:** 9/30/2010, Status: Completed

**M-045-91A, Submit an agreement change package with interim milestones to implement the panels recommendations, Due:** 12/29/2010, Status: Complete (9/27/10)

**Significant Past Accomplishments:**

Initial discussions with Ecology regarding the Panel's recommendations and draft TPA Change Package held on 9/27/10 and 11/8/10.

**Significant Planned Actions in the Next Six Months:**

Ecology and ORP reach agreement on Final Change Package by 12/28/10.

**Issues:**

## **Complete Closure of Double Shell Tanks**

**M-042-00A, Complete closure of all double shell tank farms, Due:** TBD, based upon completion of retrieval under M-62-45 plus 5 yrs but no later than 9/30/2052 Status: On Schedule

**Significant Past Accomplishments:**

None

**Significant Planned Actions in the Next Six Months:**

None

**Issues:**

None

## **Complete Acquisition of New Facilities and Submit Part B Permit Applications**

**M-090-11, Complete the Negotiation of No More Than Two Canister Storage Facility Construction Interim Milestones, Due: 12/31/12, Status: On Schedule.**

**M-090-00, Acquire/modify facilities for storage of IHLW, Due: 12/31/2019, Status: On Schedule**

**M-047-06, Complete negotiation of no more than two interim milestones governing work necessary to support completion of M-045-00, Due: 06/30/12, Status: Negotiations are not yet underway.**

**M-047-00, Complete Work Necessary to provide facilities for management of secondary waste from the WTP, Due: 12/31/2022, Status: On Schedule**

**M-062-30, Complete negotiations establishing milestones for near term actions, Due: 10/25/11, Status: On schedule**

**M-062-45ZZ, Following negotiations convert M-062-31-T01 thru M-062-34-T01 to interim milestones per M-062-45.3, Due: 4/30/2015, Status: On schedule**

**M-062-31-T01, Complete final design and submit RCRA Part B permit mod request, Due: 4/30/2016, Status: On schedule**

**M-062-32-T01, Start construction of supplemental vitrification treatment facility and/or WTP enhancements, Due: 4/30/2018, Status: On schedule**

**M-062-33-T01, Complete construction of supplemental vitrification treatment facility and/or WTP enhancements, Due: 4/30/2021, Status: On schedule**

**M-062-45XX, No later than 12/31/2021, the DOE and Ecology shall complete negotiations to establish a mechanism that will apply to resolve future disputes regarding the determinations in M-062-45, paragraphs 4 and 5, due: 12/31/2021, Status: On Schedule**

**M-062-34-T01, Complete hot commissioning of supplemental vitrification treatment facility and/or WTP enhancements, Due: 12/30/2022, Status: On schedule**

**M-062-21, Annually, submit data that demonstrates operation of the WTP, Due: 2/28/2023, Status: On Schedule**

**M-062-00, Complete Pretreatment Processing and Vitrification of HLW and LAW Tank Wastes, Due: 12/31/2047, Status: On Schedule**

**Significant Past Accomplishments:**

None

**Significant Planned Actions in the Next Six Months:**

None

**Issues:**

None

## **Interim Stabilization Consent Decree**

**D-001-00, Complete Interim Stabilization of all 29 SSTs**, Due: 09/30/04, Status: Completed on March 31, 2004, with discontinuation of pumping in U-108 and subsequent consultation with Ecology staff. Interim stabilization of S-102 and S-112 is held in abeyance by third amendment to the Consent Decree. ORP's obligation to interim stabilize S-112 was satisfied upon completion of retrieval operations. Retrieval of S-102 has been impacted by the spill at this tank. A review of the January 25, 2010, video of the tank has shown approximately 2,400 gallons of supernatant liquid remaining. This is below the criteria for interim stabilization of less than 5000 gallons supernatant liquid.

On October 21, 2010, ORP received a letter from Ecology notifying ORP of Ecology's decision to require ORP to Interim Stabilize tank 241-S-102 within 18 months of receipt of its notification.

ORP is currently preparing the required documentation to demonstrate that tank 241-S-102 meets the requirements for interim stabilization, as set forth in Case Number CT-99-5076, Third Amendment.

**Significant Accomplishments:**

- **D-001-00-R46, Quarterly Written Report**, Due: 10/31/10, Status: Completed 10/28/2010

**Significant Planned Actions in the Next Six Months:**

- Prepare and submit formal documentation that S-102 is interim stabilized.
- **D-001-00-R47, Quarterly Written Report**, Due: 01/31/2011, Status: On Schedule

**Issues:**

- Tank S-102 retrieval not completed by milestone M-045-05A date of March 31, 2007.

## **TANK WASTE SYSTEM PLAN**

**M-062-40A, Select a minimum of three scenarios that will be analyzed in the system plan,**  
Due: 10/31/2010, Status: Completed 10/27/10

**M-062-40B, Submit a system plan describing the disposition of all tank waste managed by ORP,** Due: 10/31/2011, Status: On Schedule

**M-062-40C, Select a minimum of three scenarios that will be analyzed in the system plan,**  
Due: 10/31/2013, Status: On Schedule

**M-062-40D, Submit a system plan describing the disposition of all tank waste managed by ORP,** Due: 10/31/2014, Status: On Schedule

**M-062-40ZZ, Submit a one-time Tank Waste Supplemental Treatment Technologies report if a supplemental treatment technology is proposed other than a 2nd LAW,** Due: 10/31/2014, Status: On Schedule.

**M-062-45-T01, Every six years, within six-months after last revision of the System Plan, negotiate tank waste retrieval sequencing,** Due: 4/30/2015, Status: On Schedule

### **Significant Past Accomplishments:**

Ten scenarios were agreed to on 10/27/10 for analysis in System Plan Rev. 6, thereby completing milestone M-062-40A. An additional four scenarios will be analyzed and documented as time and resources permit.

### **Significant Planned Actions in the Next Six Months:**

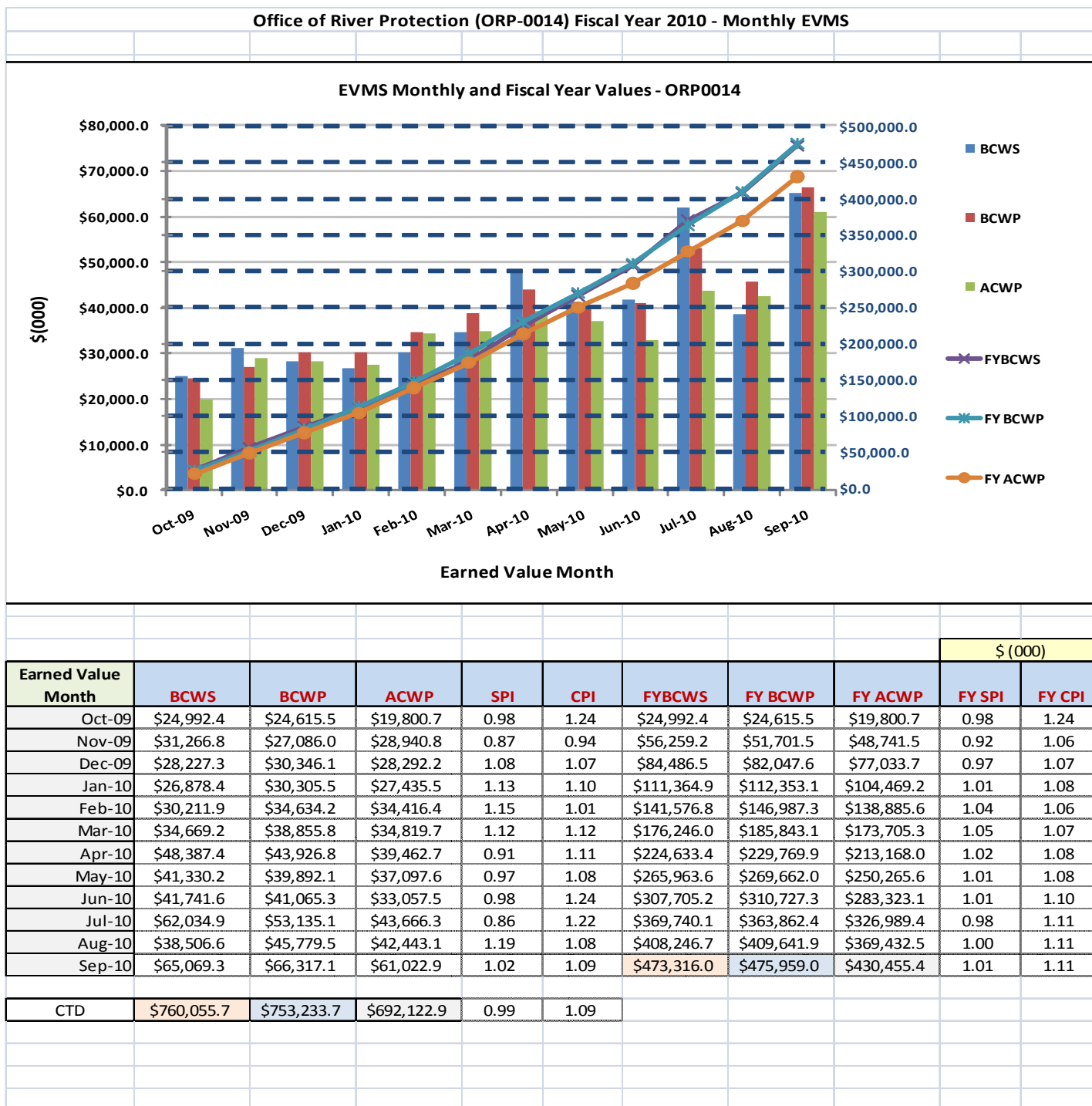
Work on System Plan Rev. 6 supporting M-062-40B during the next six months will include the following activities: Develop a detailed work schedule, develop detailed assumptions for each scenario, prepare model modification requests, initiate HTWOS modeling, V&V and data analysis and perform periodic reviews with ORP and Ecology.

### **Issues:**

None.



## Tank Farm Project EVMS Status – September 2010



### ***Project Performance***

The earned value analysis is a comparison of cost and schedule contract-to-date performance. The earned value performance reporting reflects the format, Work Breakdown Structure (WBS) reporting levels, and variance thresholds as agreed to with the Tank Farms Operations Contractor (TOC) for monthly performance reporting. The earned value analysis is not intended to be a measurement of performance against existing Tri-Party Agreement Milestones.

The favorable current month (CM) schedule variance (SV) of \$1.2M reflects continued schedule recovery and improvement and the September CM schedule performance index (SPI) was 1.02 with a majority of the schedule recovery being accomplished by Base Operations (\$1.6M). Significant favorable SV was also noted in the areas of Tank Farm Projects (\$600K) and the Engineering Program (\$600K). Unfavorable SVs were reported in Recovery Act (\$600K) and WFD/Treatment Planning/DST Retrieval/Closure (\$500K).

#### **Retrieval and Closure SSTs (\$6.9M) - Primary variances are due to:**

- *C-104 Retrieval*, (\$2.1M) delays in the installation and testing of the AMS resulting from engineering resource availability and awarding fabrication/installation contract, and delays in completing bulk retrieval.
- *C-108 Retrieval*, (\$1.9M) engineering and plant forces resources directed to higher priorities delaying fabrication of key equipment; modifications, repairs, and inspections are needed to existing equipment prior to installation of new equipment; and Plant Forces Field Work Supervisor continually reassigned to other work.
- *C-111 Retrieval*, (\$700K) construction delays resulting from the discovery of objects blocking several tank risers causing design changes and relocation of cameras and spray wands; frozen ground slowed excavation; personnel directed to higher priorities; and delays in receiving procured equipment.
- *C-Farm Infrastructure DST Receiver Tank 3*, (\$800K): the change in designation of DST #3 receiver tank from AY-101 to AN-106 does not allow performance to be taken. Efforts have been re-planned in FY11 to support C-107 retrieval.
- *Direct Push Characterization & Sampling*, (\$600K): delays in the completion of the second two (2) sites, the start and completion of field work for the remaining three (3) locations and the start and completion of UPR-82 in C Farm resulting from C-104 retrieval issues, C-111 construction activities, work package reclassification, inclement weather, inability to access C Farm and unavailable resources.
- *RA- Technology Development*, (\$700K): a change in technical approach for the MARS Vacuum system to utilize an eductor based vacuum system.
- The above variances are partially offset by a favorable SV of \$1,668k for removal of C-107 obsolete equipment (accelerated from FY11).

#### **Waste Feed Delivery/Treatment Planning/DST Retrieval/Closure: (\$1.3M):**

- *RA - SN-278/SN-279 and SN-285/SN-286 TL Upgrades*, (\$800K): Delays to the fabrication of the new pipe (260 ft); completion of the work packages for the excavation of lines; and excavation delays which was offset by acceleration of the waste box procurements which wasn't planned to start until FY11.

- *Next Generation Flowsheet/Glass Chemistry Support*, (\$500K): delays in awarding design of the Cold Crucible Induction Melter (CCIM) technology scope that is based on resolution of outstanding Intellectual Property (IP) issues and access to WTP design information.
- *RA- Remove Obsolete Equipment*, (\$11.5M): delays in field work for the DST Obsolete Equipment Removal and demolish AN/AW Exhauster project resulting from delayed work planning and competing resource
- Unfavorable SVs partially offset by (1) *RA- AW COB Isolation*, (\$1,3M) due to completion of the COB removal activities ahead of schedule as access was available at AW Farm earlier than planned; (2) *RA- DST Valve Assembly Upgrades*, (\$3.7M) the AP-VP jumper fabrication is near completion allowing initial installation to start earlier than the planned.
- Favorable SVs partially offset by *RA- Remove Obsolete Equipment*, (\$1.5M): delays in field work for the DST Obsolete Equipment Removal and demolish AN/AW Exhauster project resulting from delayed work planning and competing resource.

**TOC CTD favorable CV of \$61.1M is driven by:  
Base Operations, \$30.2M:**

- *SST Safe Storage & Operations*, (\$4.7M) is primarily due to a lower level of essential services (laundry, housekeeping, cover block inspections, pumping and resealing pits, ground scans, etc.) being required to support the SST farms. This positive cost variance is offset by overruns in DST Safe Storage & Operations and DST/SST Maintenance accounts due to emphasis on reducing the PM and CM backlog.
- Finance Support, Facility/Property Management, Liquidations, Information Resource Management (\$9.7M) due to continuity of service over liquidation in FY 09, labor underruns and unfilled positions, and lower than planned material expenditures.
- *RA- 222S Roof Replacement*, (\$2.1M) replacement of the roof was completed with significantly less cost than planned due to better conditions, less material removal, use of efficient roof removal equipment, and less hazardous waste than planned.
- *RA- Remove Obsolete Equipment*, (\$2.0M) due to less hours than planned to prepare the engineering documents to support the Demolish AN and AW Exhausters project and documentation for the Remove DST Obsolete Equipment project and efficiencies gained from experienced field support that took less than planned durations, and fewer field resources to remove Area Radiation Monitor (ARM) in AP farm, and compressors in AP and AW farms.
- *SST Integrity Project*, (\$1.8M) efficiencies from using expert panel support contracts, less hours to conduct research and implementation of the data collection and plan.
- *RA- Program Management and, Training Program*, (\$9.2M) due to less subcontractor support, staffing vacancies, less material cost than planned and associated training.
- *Tank Chemistry Control*, (\$1.4M) due to subcontractor efficiencies during design and fabrication efforts of the AY-101 Corrosion Probe as a result of designing two similar probes with the same functional characteristics as opposed to each probe having unique functional characteristics. Labor efficiencies were resulted by installing the AY-101 and AY-102 Corrosion Probes at the same time due to the close proximity of the tanks and the ability to combine the field work.
- *RA- Drawing Reconstitution*, (\$1.4M): lower cost for ROS staff as a result of a lower field rate than planned and efficiencies gained through tank farm walk downs.
- *RA- DST Farm Upgrades*, (\$1.4M) the Vent Reliability Study completed under budget as technical evaluations determined the AN Exhauster Evaluation bounds all the HVAC systems, and by

resolving the National Electrical Code (NEC) issues in the SY Farm; and the DST Farm Replace Drain Seals project performed more efficiently than planned due to a dedicated team.

- *DST Integrity Project*, (\$1.3M) due to the proximity of the tanks to perform the AW-101 and AW-105 Ultrasonic Test (UT) Examinations in parallel resulted in a labor cost efficiency; cleaner than expected surface conditions at AW-106 resulted in an additional labor cost efficiencies and less subcontract cost for the Corrosion Probe Surveillance.

#### **WFD/Treatment Planning/DST Retrieval/Closure, \$18.9M:**

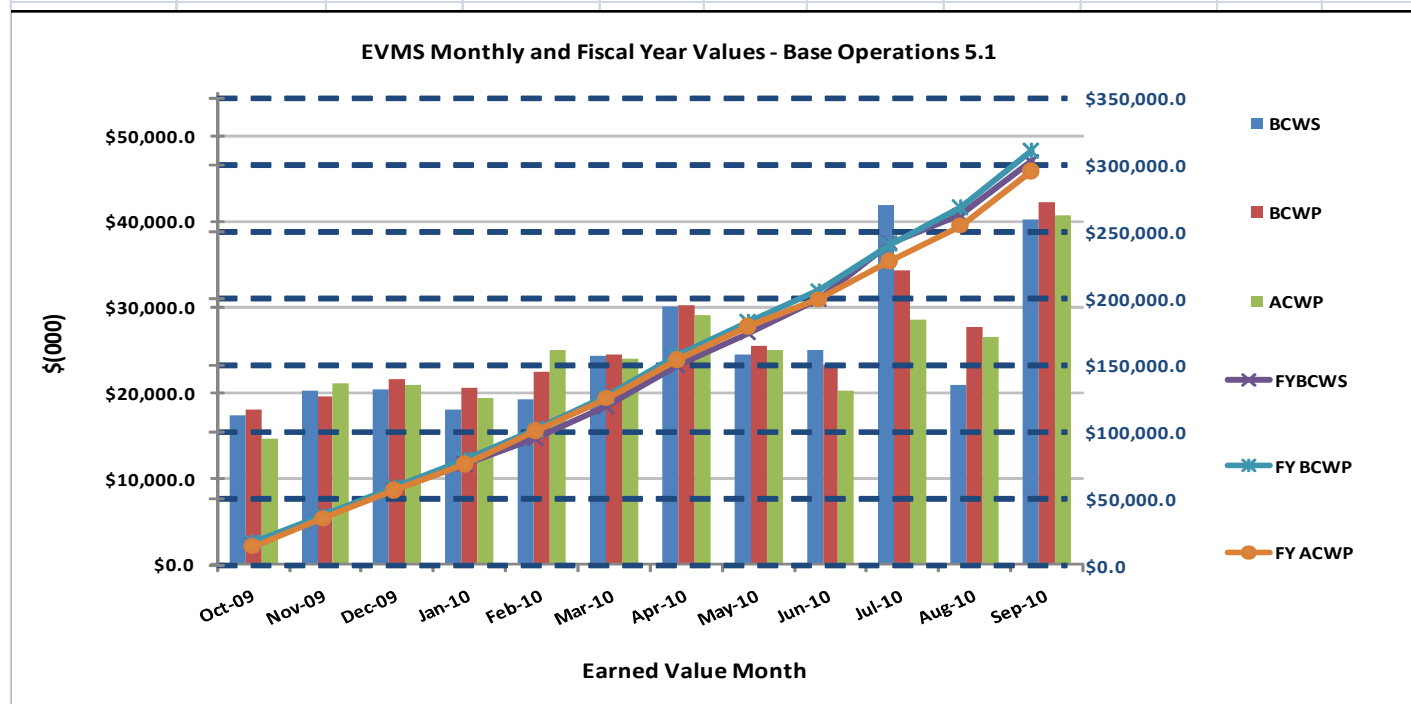
- *RA- WFE Technology Maturity Validation*, (\$4.3M) due to lower rates for subcontract work; Process Hazard Analysis and Nuclear safety activities being performed with WRPS labor instead of subcontractor; decrease in procurement cost for WFE Component (304L Stainless Steel versus Hastelloy) and lease versus buy for subsystem equipment.
- *WFD PE/Flow Sheet and AWA Project Planning and Mobilization*, (\$1.9M) due to delays in obtaining contract support and staff vacancy.
- *RA- AW COB Isolation*, (\$1.4M) subcontractor support and less resources than planned due to firm-fixed price contract and strong working relation between HAMTC (HPT's), engineering and experienced construction craft.
- *RMF/SCIX/FNSR Technology/Evaluations*, (\$1.3M) de-obligated from WRPS funds to direct fund both SNNL and ATL in support of Fluid Bed Steam Re-forming sample analysis and product testing.
- *RA- Secondary Waste Form Testing*, (\$900K) due to lower contract costs associated with Ceramicrete and FBSR test plan development and lower cost of chemicals for testing.
- *RA- WFE Application Viability*,(\$600K) due to efficiencies from completing the SST consolidation pilot-scale testing, Test Plans, and Procedures in parallel and less subcontractor and labor resources than planned.
- *IDF Glass Testing*,(\$500K) due to efficiencies with executing Glass Dissolution modeling by utilizing prior knowledge from similar activities; reduced scope by concentrating on select glass compositions; and efficiencies associated with initial set-up, calibration for testing, and economy of scale efficiencies from analyzing a large number of samples a day.
- *RA-WFE-Specific Site & Regulatory Interfaces*,(\$500K) due to completing Specific Site Interfaces and Requirements report with current staff utilizing prior knowledge and eliminating the need for engineering support; lower rates for subcontractor work; revised strategy for only a single identified interfacing system specification; less subcontract work on the Environmental Plan.
- *Hanford IHLW Storage Project Support, RPP System Plan, WFD Technical Baseline and Tank Waste Database Management* (\$2.6M) due to less staff engineering staff than planned, HTWOS model improvements, G2 training and fewer resources to complete the TWINs database diagnostic activities.

#### **Retrieval and Closure SSTs, \$11.8M:**

- *Hose in Hose Transfer Line Disposition*, (\$4.2M) due to efficiencies in engineering and the field by grouping multiple hoses together to work in parallel and several HIHTLs were less contaminated than anticipated, therefore not requiring flushing or high radiation controls.

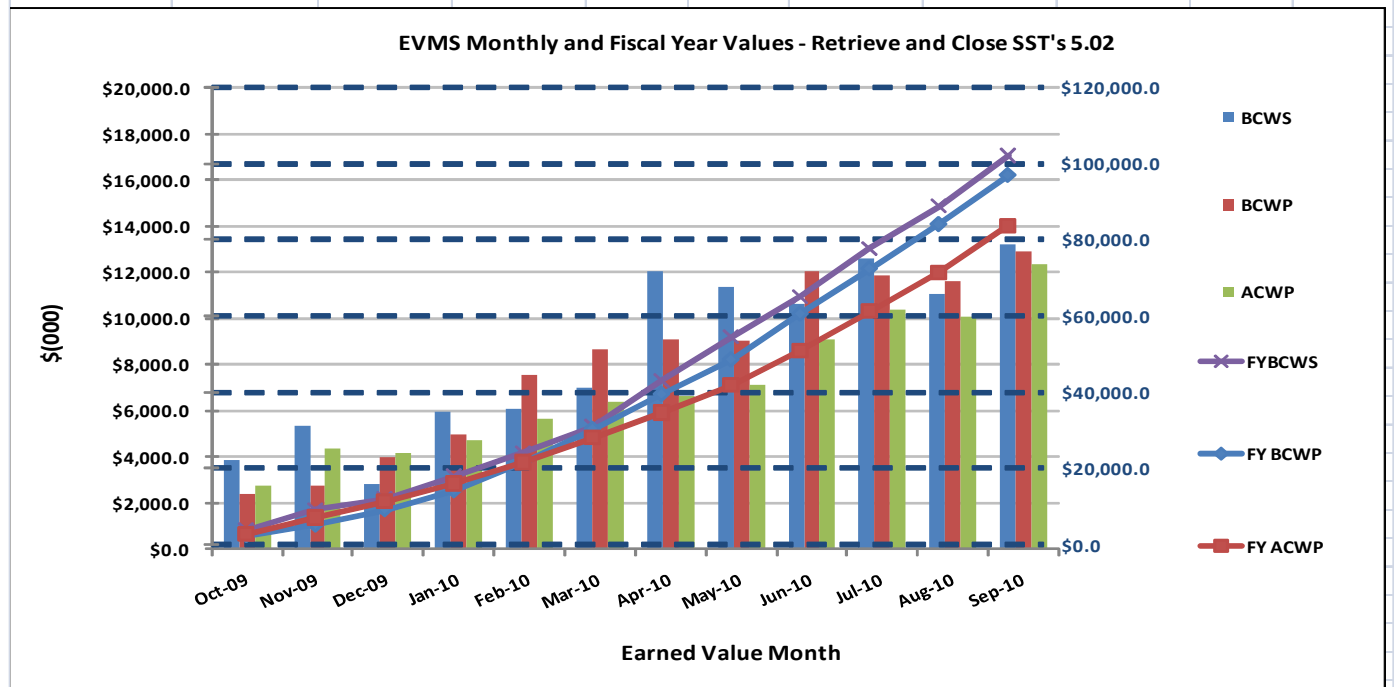
- *C-Farm Infrastructure DST Receiver Tank 3*, (\$2.5M) due to efficiencies from changing the designation of the receiver tank from AY-101 to AN-106. Current infrastructure setup to AN Farm avoids duplicating efforts to AY-Farm saving resources and reduces the amount of materials and equipment to purchase and install.
- *C-110 Retrieval*, (\$1,8M) efficiencies captured during C-110 waste retrieval operations.
- *Catch Tank & Pipeline Reporting*, (\$1.8M) due to using direct labor vs. subcontract support.
- Offsetting unfavorable variances include: *C-104 Retrieval*, (\$8.4M) due to increased planning and preparatory work required for completion of 04-A jumper removal, pump removal/disposal, and sluicer installation), and *C-111 Retrieval*, (\$3.22M) due to overruns in construction partially due to restricted access to C Farm, idling construction crews due to vapor issues, and additional overtime in preparation of the saltwell pump and screen removal.

## Office of River Protection (ORP-0014) Fiscal Year 2010 - Monthly EVMS



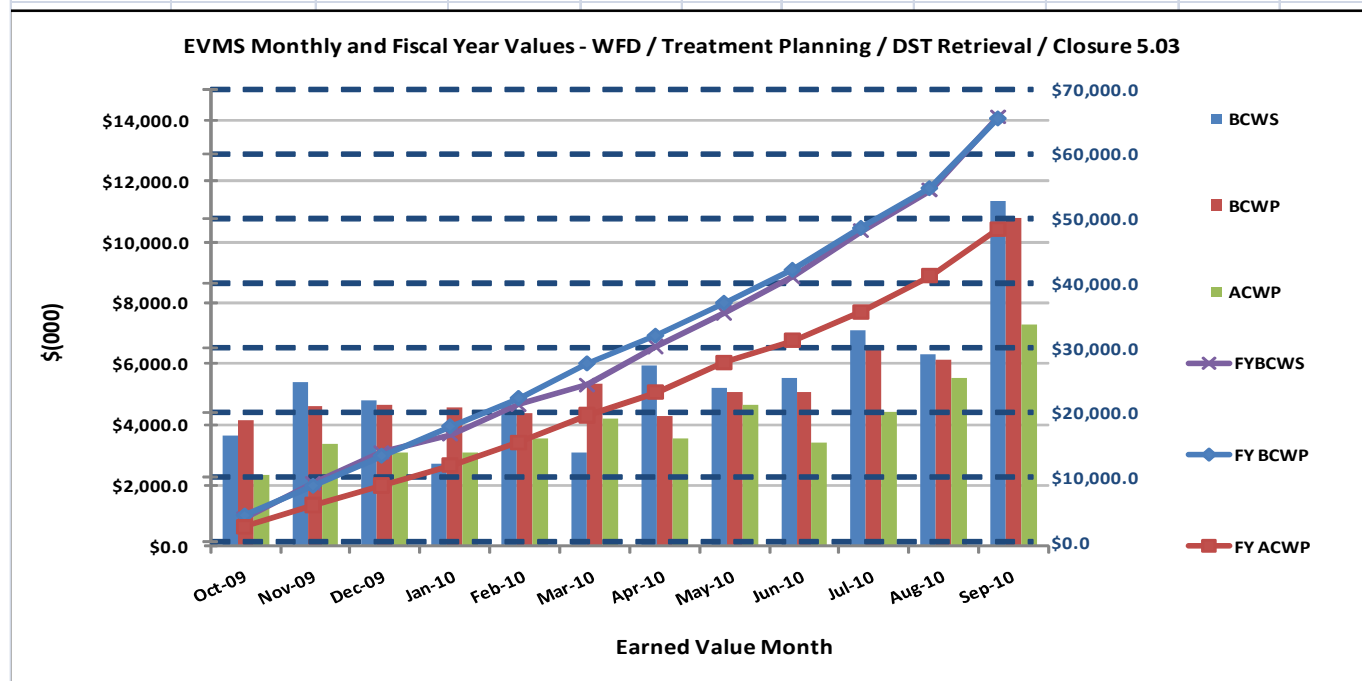
									\$(000)	
Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-09	\$17,324.1	\$18,045.7	\$14,675.9	1.04	1.23	\$17,324.1	\$18,045.7	\$14,675.9	1.04	1.23
Nov-09	\$20,359.0	\$19,660.3	\$21,162.5	0.97	0.93	\$37,683.1	\$37,706.0	\$35,838.4	1.00	1.05
Dec-09	\$20,460.6	\$21,629.9	\$20,903.5	1.06	1.03	\$58,143.7	\$59,335.9	\$56,741.9	1.02	1.05
Jan-10	\$18,023.0	\$20,599.9	\$19,515.3	1.14	1.06	\$76,166.7	\$79,935.8	\$76,257.2	1.05	1.05
Feb-10	\$19,243.7	\$22,470.9	\$25,050.8	1.17	0.90	\$95,410.4	\$102,406.7	\$101,308.0	1.07	1.01
Mar-10	\$24,376.3	\$24,534.0	\$24,024.1	1.01	1.02	\$119,786.7	\$126,940.7	\$125,332.1	1.06	1.01
Apr-10	\$30,116.5	\$30,320.6	\$29,043.7	1.01	1.04	\$149,903.2	\$157,261.3	\$154,375.8	1.05	1.02
May-10	\$24,542.9	\$25,503.7	\$25,031.9	1.04	1.02	\$174,446.1	\$182,765.0	\$179,407.7	1.05	1.02
Jun-10	\$25,076.2	\$23,404.8	\$20,235.5	0.93	1.16	\$199,522.3	\$206,169.8	\$199,643.2	1.03	1.03
Jul-10	\$42,000.8	\$34,401.4	\$28,515.5	0.82	1.21	\$241,523.1	\$240,571.2	\$228,158.7	1.00	1.05
Aug-10	\$20,914.7	\$27,665.1	\$26,561.5	1.32	1.04	\$262,437.8	\$268,236.3	\$254,720.2	1.02	1.05
Sep-10	\$40,247.2	\$42,352.2	\$40,797.3	1.05	1.04	\$302,685.0	\$310,588.5	\$295,517.5	1.03	1.05
CTD	\$512,984.0	\$514,333.3	\$484,086.6	1.00	1.06					

## Office of River Protection (ORP-0014) Fiscal Year 2010 - Monthly EVMS



									\$ (000)	
Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-09	\$3,879.4	\$2,415.8	\$2,778.4	0.62	0.87	\$3,879.4	\$2,415.8	\$2,778.4	0.62	0.87
Nov-09	\$5,342.9	\$2,749.0	\$4,389.3	0.51	0.63	\$9,222.3	\$5,164.8	\$7,167.7	0.56	0.72
Dec-09	\$2,804.1	\$4,011.8	\$4,196.3	1.43	0.96	\$12,026.4	\$9,176.6	\$11,364.0	0.76	0.81
Jan-10	\$5,981.7	\$4,964.2	\$4,719.1	0.83	1.05	\$18,008.1	\$14,140.8	\$16,083.1	0.79	0.88
Feb-10	\$6,108.9	\$7,543.9	\$5,637.0	1.23	1.34	\$24,117.0	\$21,684.7	\$21,720.1	0.90	1.00
Mar-10	\$6,982.0	\$8,693.1	\$6,375.4	1.25	1.36	\$31,099.0	\$30,377.8	\$28,095.5	0.98	1.08
Apr-10	\$12,045.6	\$9,109.3	\$6,629.9	0.76	1.37	\$43,144.6	\$39,487.1	\$34,725.4	0.92	1.14
May-10	\$11,375.7	\$9,066.1	\$7,121.2	0.80	1.27	\$54,520.3	\$48,553.2	\$41,846.6	0.89	1.16
Jun-10	\$10,605.7	\$12,023.8	\$9,089.9	1.13	1.32	\$65,126.0	\$60,577.0	\$50,936.5	0.93	1.19
Jul-10	\$12,622.0	\$11,864.2	\$10,367.1	0.94	1.14	\$77,748.0	\$72,441.2	\$61,303.6	0.93	1.18
Aug-10	\$11,038.5	\$11,634.3	\$10,056.5	1.05	1.16	\$88,786.5	\$84,075.5	\$71,360.1	0.95	1.18
Sep-10	\$13,217.8	\$12,915.5	\$12,380.2	0.98	1.04	\$102,004.3	\$96,991.0	\$83,740.3	0.95	1.16
CTD	\$161,270.1	\$154,353.3	\$142,529.1	0.96	1.08					

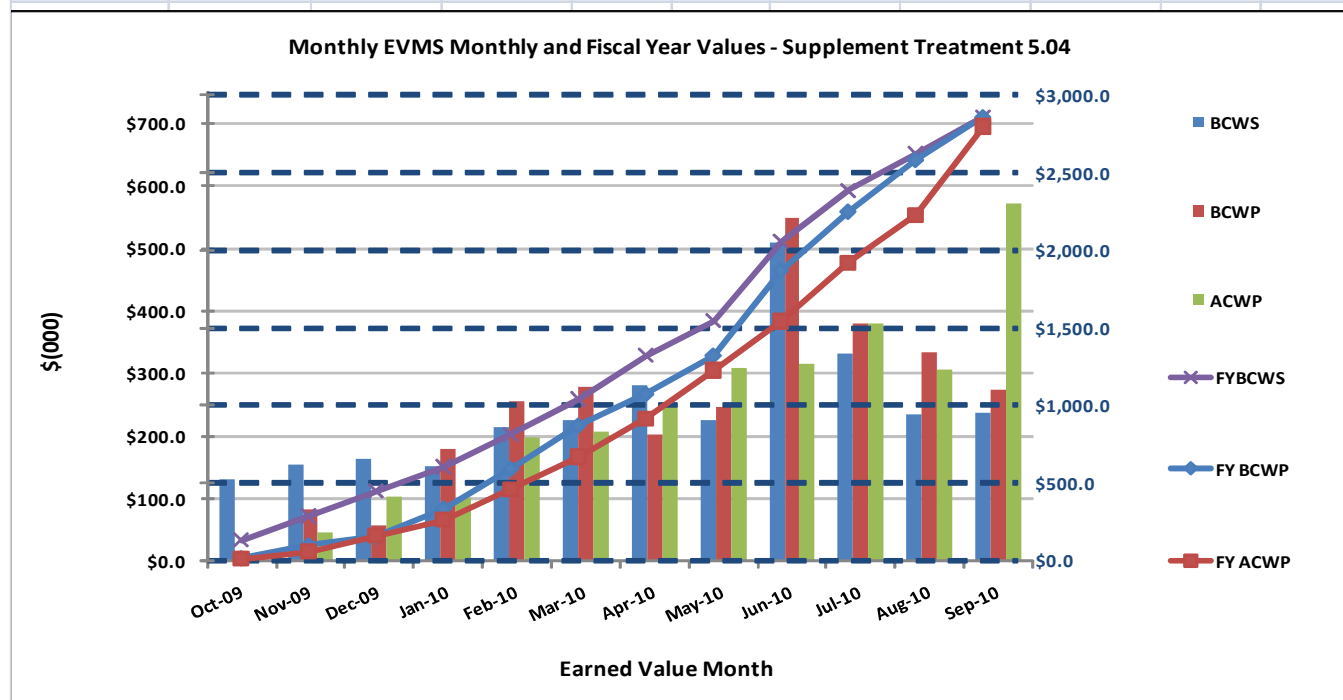
## Office of River Protection (ORP-0014) Fiscal Year 2010 - Monthly EVMS



									\$ (000)	
Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-09	\$3,656.9	\$4,136.9	\$2,334.4	1.13	1.77	\$3,656.9	\$4,136.9	\$2,334.4	1.13	1.77
Nov-09	\$5,409.6	\$4,593.0	\$3,344.1	0.85	1.37	\$9,066.5	\$8,729.9	\$5,678.5	0.96	1.54
Dec-09	\$4,799.6	\$4,647.3	\$3,088.7	0.97	1.50	\$13,866.1	\$13,377.2	\$8,767.2	0.96	1.53
Jan-10	\$2,721.4	\$4,560.6	\$3,100.1	1.68	1.47	\$16,587.5	\$17,937.8	\$11,867.3	1.08	1.51
Feb-10	\$4,645.6	\$4,364.2	\$3,529.9	0.94	1.24	\$21,233.1	\$22,302.0	\$15,397.2	1.05	1.45
Mar-10	\$3,085.9	\$5,349.3	\$4,212.9	1.73	1.27	\$24,319.0	\$27,651.3	\$19,610.1	1.14	1.41
Apr-10	\$5,944.0	\$4,293.9	\$3,539.5	0.72	1.21	\$30,263.0	\$31,945.2	\$23,149.6	1.06	1.38
May-10	\$5,186.6	\$5,074.9	\$4,635.5	0.98	1.09	\$35,449.6	\$37,020.1	\$27,785.1	1.04	1.33
Jun-10	\$5,549.6	\$5,087.7	\$3,415.8	0.92	1.49	\$40,999.2	\$42,107.8	\$31,200.9	1.03	1.35
Jul-10	\$7,081.0	\$6,489.7	\$4,404.0	0.92	1.47	\$48,080.2	\$48,597.5	\$35,604.9	1.01	1.36
Aug-10	\$6,317.8	\$6,145.9	\$5,519.6	0.97	1.11	\$54,398.0	\$54,743.4	\$41,124.5	1.01	1.33
Sep-10	\$11,367.0	\$10,774.4	\$7,274.3	0.95	1.48	\$65,765.0	\$65,517.8	\$48,398.8	1.00	1.35
CTD	\$82,910.1	\$81,655.5	\$62,706.2	0.98	1.30					



## Office of River Protection (ORP-0014) Fiscal Year 2010 - Monthly EVMS



									\$ (000)	
Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-09	\$131.9	\$17.0	\$12.0	0.13	1.42	\$131.9	\$17.0	\$12.0	0.13	1.42
Nov-09	\$155.2	\$83.7	\$44.8	0.54	1.87	\$287.1	\$100.7	\$56.8	0.35	1.77
Dec-09	\$163.0	\$57.1	\$103.6	0.35	0.55	\$450.1	\$157.8	\$160.4	0.35	0.98
Jan-10	\$152.3	\$180.8	\$101.0	1.19	1.79	\$602.4	\$338.6	\$261.4	0.56	1.30
Feb-10	\$213.8	\$255.2	\$198.7	1.19	1.28	\$816.2	\$593.8	\$460.1	0.73	1.29
Mar-10	\$225.0	\$279.3	\$207.3	1.24	1.35	\$1,041.2	\$873.1	\$667.4	0.84	1.31
Apr-10	\$281.3	\$202.9	\$249.6	0.72	0.81	\$1,322.5	\$1,076.0	\$917.0	0.81	1.17
May-10	\$225.0	\$247.4	\$309.1	1.10	0.80	\$1,547.5	\$1,323.4	\$1,226.1	0.86	1.08
Jun-10	\$510.0	\$549.0	\$316.2	1.08	1.74	\$2,057.5	\$1,872.4	\$1,542.3	0.91	1.21
Jul-10	\$331.0	\$379.8	\$379.7	1.15	1.00	\$2,388.5	\$2,252.2	\$1,922.0	0.94	1.17
Aug-10	\$235.6	\$334.2	\$305.6	1.42	1.09	\$2,624.1	\$2,586.4	\$2,227.6	0.99	1.16
Sep-10	\$237.3	\$275.0	\$571.1	1.16	0.48	\$2,861.4	\$2,861.4	\$2,798.7	1.00	1.02
CTD	\$2,891.5	\$2,891.5	\$2,801.1	1.00	1.03					

Fiscal Year 2010 Consent Decree & Tri-Party Agreement Milestone Status													
Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
D-00A-18	Complete Structural Steel Erection below Elevation 56' in PT Facility	12/31/09	07/29/09										
D-001-00R-42	Quarterly Report	10/31/09	10/28/09										
D-001-00R-43	Quarterly Report	01/31/10	01/28/10										
D-001-00R-44	Quarterly Report	04/30/10	04/30/10										
D-001-00R-45	Quarterly Report	07/31/10	07/29/10										
*D-00C-01A	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	07/31/10	07/26/10										
* - Submittal pursuant to D-00C-01 series satisfies M-062-01 series reporting.													

Fiscal Year 2010 Consent Decree & Tri-Party Agreement Milestone Status													
Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
M-045-56F	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/31/10	06/09/10										
M-045-90	Complete Interim Barrier Demonstration Report for the T-106 Interim Barrier	09/30/10	09/27/10										
M-045-91	Establish a Panel and Report on SST Integrity Assurance Review	09/30/10	09/27/10										
M-045-92A	Establish Selection Criteria for Inst. of Additional Barriers	03/31/10	03/24/10										
M-045-92B	DOE Submit to Ecology a Final Design and Monitoring Plan for TY Farm Interim Barrier	03/31/10	10/22/09										
M-045-92C	Complete Installation of TY Farm Interim Barrier	09/30/10	09/23/10										

Fiscal Year 2010 Consent Decree & Tri-Party Agreement Milestone Status													
Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
M-062-01T	Submit Semi-Annual Project Compliance Report	01/31/10	01/29/10										
*M-062-01U	Submit Semi-Annual Project Compliance Report	07/31/10	07/26/10										
* Submittal pursuant to D-00C-01 series satisfies M-062-01 series reporting.													

Fiscal Year 2011 Consent Decree & Tri-Party Agreement Milestone Status													
Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
D-001-00-R46	Quarterly Report	10/31/10	10/28/10										
D-001-00-R47	Quarterly Report	01/31/11		X									
D-001-00-R48	Quarterly Report	04/30/11		X									
D-001-00-R49	Quarterly Report	07/31/11		X									
D-00C-01B	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	01/31/11		X									
D-00C-01C	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	07/31/11											
D-00C-02A	Submit to Ecology and Oregon Monthly Summary Reports	11/30/10		X									
**D-00C-02B	Submit to Ecology and Oregon Monthly Summary Reports	12/31/10											
D-00A-20	Complete Construction of Structural Steel to Elevation 14' in HLW Facility	12/31/10	01/13/10										
** Future Monthly Reports will be added as necessary to maintain a two-month activity.													

Fiscal Year 2011 Consent Decree & Tri-Party Agreement Milestone Status													
Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
M-036-01A	Submit to EPA & Ecology Lifecycle, Scope, Schedule & Cost for Hanford Site (RL is DOE Lead)	06/25/2011		X									
M-045-13	Interim Completion of Tank S-112 SST Waste Retrieval and Closure	TBD [In accordance with M-045-84 or -85]		X									
M-045-13E	Complete Negotiations for Interim Milestones for Closure of S-112	TBD [In accordance with M-045-84 or -85]		X									
M-045-15	Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project.	06/30/11			X								
M-045-15A	Submit a Retrieval Data Report Pursuant to Agreement Appendix I	06/30/11			X								
M-045-15B	Remaining Wastes Adequately Characterized; Risk Assessment Completed for Residuals Remaining in the Tank	06/30/11			X								

Fiscal Year 2011 Consent Decree & Tri-Party Agreement Milestone Status													
Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
M-045-15C	Update S-102 Component Closure Activity Plan	06/30/11			X								
M-045-15D	Exception to Waste Retrieval Criteria Pursuant to Agreement Appendix H	06/30/11			X								
M-045-56G	Ecology and DOE Agree to Meet, at a Minimum, Yearly (by July)	07/31/11		X									
M-045-80	Complete those Portions of C-200 Closure Demonstration Plan Necessary to Complete Closure Plan Development for SST System	01/31/11		X									
M-045-91A	Submit an Agreement Change Package with Interim Milestones to Implement the Panel's Recommendations M-045-91	12/29/10	09/27/10										
M-045-92D	Complete Negotiations to Schedule Remaining 4 Additional Barriers	12/31/10		X									
M-045-92E	Meet Yearly on Performance of Barrier	12/31/10		X									

Fiscal Year 2011 Consent Decree & Tri-Party Agreement Milestone Status													
Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
M-045-100	Submit to Ecology an Agreement Primary Document a Catch Tank "Assumed Leak" Response Plan.	12/27/10		X									
M-045-101	Submit to Ecology as an Agreement Primary Document a Report on all Catch Tanks and Pipelines Used for SST Operations	12/27/10		X									
M-062-01V	Submit Semi-Annual Project Compliance Report	01/31/11		X									
M-062-01V	Submit Semi-Annual Project Compliance Report	07/31/11		X									
M-062-20	Complete All 28 Issues in Independent WTP Flowsheet & Throughput Assessment	12/31/10		X									
M-062-40A	Select a Minimum of 3 scenarios	10/31/10	10/27/10										



## Reports

**D-00C-02, Submit to Ecology & State of Oregon Monthly Summary Report Documenting Progress During Previous Month, Due: End of Each Month, Status: On Schedule**

**D-00C-01A, Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6-Month Period, Due: 1/31/2011, Status: On Schedule**

**D-006-00-A1, Provide State of Oregon notice of meetings in D-006-00-A, etc. no less than 30 days before they are scheduled, Due: 9/25/2013, Status: On Schedule**

**D-006-00-A, Meet Approximately Every Three Years After Entry of Decree to review requirements of the Consent Decree, Due: 10/25/2013, Status: On Schedule**

## **Hanford Waste Treatment and Immobilization Plant (WTP) Project**

**M-062-20, Close all 28 issues in Comprehensive Review of the Hanford Waste Treatment Plant Flowsheet and Throughput Assessment, Due: 12/31/2010, Status: On Schedule**

**M-062-01U, Submit Semi-Annual Project Compliance Report, Due: 7/31/2010, Status: Complete**

**M-062-01V, Submit Semi-Annual Project Compliance Report, Due: 1/31/2011, Status: On Schedule**

**M-062-49, Submit a report to Ecology demonstrating that the WTP is designed to accomplish, pretreat 100% of retrievable waste, vitrify 100% of separated hi level waste, WTP LAW with Supplemental treatment can vitrify 100% of separated low level waste stream, Due: 10/31/2011, Status: On Schedule**

**D-00A-06, Complete Methods Validations, Due: 12/31/2017, Status: On Schedule**

**D-00A-17, Hot Start of Waste Treatment Plant, Due: 12/31/2019, Status: On Schedule**

**D-00A-01, Achieve Initial Plant Ops for WTP, Due: 12/31/2022, Status: On Schedule**

There are about 3,237 FTE equivalent contractor [Bechtel National Inc. (BNI)] and subcontractor personnel working on the WTP Project, including 1,071 craft, 520 non-manual, and about 263 subcontractor personnel FTE equivalents working at the WTP construction site (all facilities). Overall project percent complete through September 2010 is 57%, design and engineering is 82% complete, procurement is 59% complete and construction is 54% complete.

The overall WTP Project schedule variance (SV) in September was a negative (\$0.9M), the cost variance (CV) was a positive \$13.7M. The negative SV came from Plant Equipment, and Construction Subcontracts. The positive CV came from a craft labor wage rate adjustment to the Construction Craft control accounts.

Following is the status through the end of September for current project issues:

### **Significant Past Accomplishments:**

In early October, 2010, the Defense Nuclear Facilities Safety Board (DNFSB) held a three part public hearing and meeting in Richland, Washington regarding safety-related aspects of the Waste Treatment & Immobilization Plant Project. Testimony was given by staff from the Department of Energy, Bechtel National, Inc., URS Corporation, and industry experts and consultants. In addition, members of the public were invited to comment. The hearing record remains open until January 6, 2011. Additional information and material may be submitted to: Defense Nuclear Facilities Safety Board, 625 Indiana Avenue, NW., Suite 700, Washington, DC 20004-2901.

Waste Treatment & Immobilization Plant Project Construction Project Review was held November 2-4, 2010. A full report will be prepared and distributed in January.

Received delivery of the first of two LAW Melters.  
Began fabrication of Tier 5 (98-ft to 108-ft) structural steel at the PT.  
Received delivery of the 30-ton hot cell bridge crane for the PT.  
Completed installation of the melter rail filler plate and the freight elevator platform in the LAW.

**Significant Planned Actions in the Next Six Months:**

There will be a mini Construction Project Review in March 2011.  
A full Construction Project Review is scheduled for May 2011.  
Complete fabrication of UFP-1A and UFP-1B vessels in the PT.  
Complete installation of hot cell crane rails in the PT.  
Begin installation of duct, pipe, and support steel in the Filter Cave in the HLW.  
Receive Canister Decontamination Vessels in the HLW.  
Receive LAW autosampling (ASX) equipment.  
Begin installation of LAB autosampling (ASX) equipment.  
Award Emergency Diesel Generator (EDG) procurement.

**Issues:**

No significant issues at this time.

## WTP – Fiscal Year To-Date Performance

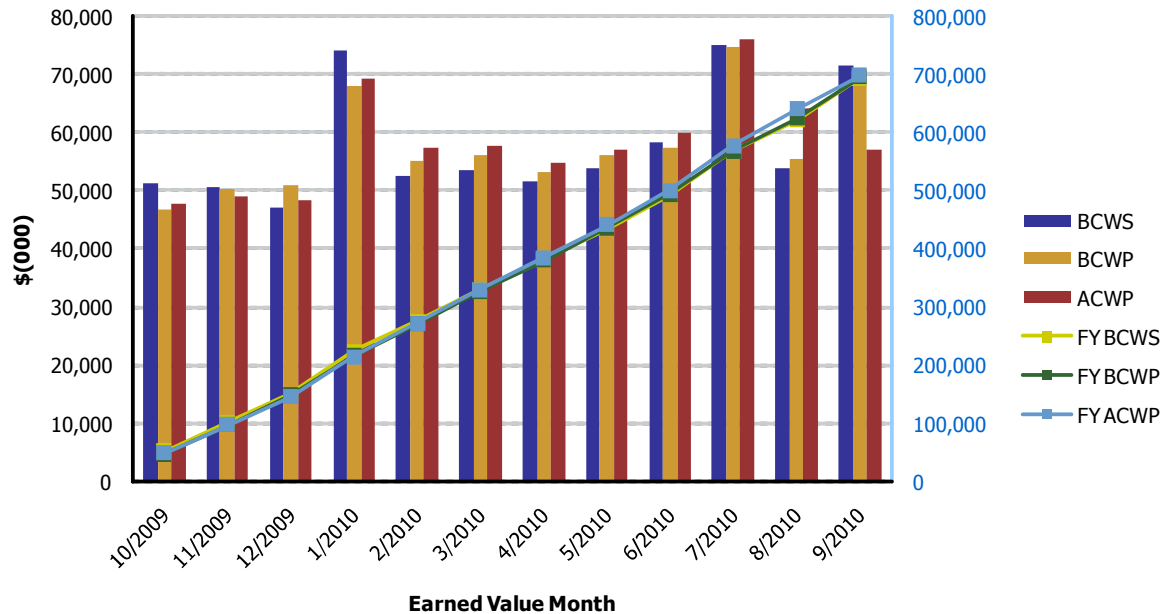
Data Set: FY 2010 Earned Value Data

Data as of: Sept 2010

Report Number: **EXC-01a**

**River Protection**  
**01-D-416 - Waste Treatment Plant (WTP) Project**

Monthly EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2009	\$51,264	\$46,742	\$47,659	0.91	0.98	\$51,264	\$46,742	\$47,659	0.91	0.98
Nov 2009	\$50,479	\$50,256	\$48,883	1.00	1.03	\$101,743	\$96,998	\$96,542	0.95	1.00
Dec 2009	\$47,078	\$50,905	\$48,202	1.08	1.06	\$148,821	\$147,903	\$144,744	0.99	1.02
Jan 2010	\$74,085	\$68,098	\$69,303	0.92	0.98	\$222,906	\$216,001	\$214,047	0.97	1.01
Feb 2010	\$52,534	\$55,070	\$57,409	1.05	0.96	\$275,440	\$271,071	\$271,456	0.98	1.00
Mar 2010	\$53,617	\$56,053	\$57,679	1.05	0.97	\$329,057	\$327,124	\$329,135	0.99	0.99
Apr 2010	\$51,463	\$53,194	\$54,714	1.03	0.97	\$380,520	\$380,318	\$383,849	1.00	0.99
May 2010	\$53,809	\$56,024	\$57,113	1.04	0.98	\$434,329	\$436,342	\$440,962	1.00	0.99
Jun 2010	\$58,177	\$57,357	\$60,051	0.99	0.96	\$492,506	\$493,699	\$501,013	1.00	0.99
Jul 2010	\$75,087	\$74,860	\$76,146	1.00	0.98	\$567,593	\$568,559	\$577,159	1.00	0.99
Aug 2010	\$53,886	\$55,351	\$63,983	1.03	0.87	\$621,479	\$623,910	\$641,142	1.00	0.97
Sep 2010	\$71,638	\$70,761	\$57,109	0.99	1.24	\$693,117	\$694,671	\$698,251	1.00	0.99
PTD	\$5,727,349	\$5,735,549	\$5,758,029	1.00	1.00					

## **Pretreatment (PT) Facility**

**D-00A-18, Complete Structural Steel Erection Below 56' in PT Facility, Due: 12/31/2009, Status: Complete**

**D-00A-19, Complete Elevation 98' Concrete Floor Slab in PT Facility, Due: 12/31/2014, Status: On Schedule**

**D-00A-13, Complete Installation of Pretreatment Feed Separation Vessels, Due: 12/31/2015 Status: On Schedule**

**D-00A-14, PT Facility Construction Substantially Complete, Due: 12/31/2017, Status: On Schedule**

**D-00A-15, Start PT Facility Cold Commissioning, Due: 12/31/2018, Status: On Schedule**

**D-00A-16, PT Facility Hot Commissioning Complete, Due: 12/31/2019, Status: On Schedule**

### **Significant Past Accomplishments:**

The PT Facility will separate radioactive tank waste into High-Level Waste (HLW) and Low-Activity Waste (LAW) fractions and transfer each waste type to the respective vitrification facility for immobilization. Overall facility percent complete is 47%, engineering/design is 81.5% complete, procurement is 44.5% complete and construction is 33.5% complete.

Overall construction continues to perform well. Construction completions for the month of October include: placement of two slabs at the 77-ft elevation and placement of the first concrete wall from the 77-ft to 98-ft elevation, substantial completion of fabrication of Tier 4 (77-ft to 98-ft elevation) structural steel and began fabrication of Tier 5 (98-ft to 108-ft) structural steel, and delivery of the 30-ton hot cell handling bridge crane.

Rebar and embed installation and fabrication of rebar wall curtains continues to support additional slab and wall placements at the 77-ft elevation. Installation of piping, HVAC ductwork, cable trays, and hotcell crane rail girders continues. Thermite welding of the hot cell crane rails has been proceeding well, with the south-side crane rail, and the first welds on the north side crane rail been completed. Installation of HVAC ducts continues ahead of the recovery plan developed to meet the baseline schedule by April 2011.

Engineering continues to implement the changes from the technical issue resolutions in the P&ID drawings and other documents, which will support development of Baseline Change Proposals (BCPs) to update the baseline. Four hundred (400) isometric drawings were issued for construction. Material Requisitions were issued to purchase the ultrafilters, and vessel modifications. Contracts were awarded for the Ultrafilter Process Pulse Pots and the Demineralized Water, Sodium Hydroxide Reagent, and Nitric acid Reagent vessels.

**Significant Planned Actions in the Next Six Months:**

- Complete LOAM validation testing for the non-Newtonian vessel configuration
- Complete planning for the Large Scale testing for the validation of vessel mixing Scale-up
- Issue for construction (IFC) drawings for the remaining 5<sup>th</sup> lift walls (El. 77' -98', column lines 17-26)
- Issue the revised P&ID's and Calculations for the Pretreatment Vessel Vent Process (PVP) system
- Complete the coupled dynamic analysis for the Waste Feed (FEP) and Treated Low (TLP) evaporators
- Complete fabrication of 2 major Jumper frames
- Complete fabrication of UFP-1A and UFP-1B vessels
- Complete installation of hot cell crane rails
- Install the 30-ton hot cell crane
- Install 2 hot cell shield doors
- Install 6 slabs and 9 walls for a total of 1500 CY

**Issues:**

Design and fabrication of vessel HLP-22, is the current critical path for PT. Re-analysis and fabrication modifications of vessels due to seismic and other dynamic load increases continue. Efforts are underway to add additional resources to aid in the progression of vessel analysis. Design and analysis has been completed for vessel UFP-62C, and the draft permit package has been provided to the Department of Ecology for review. Discussions will be ongoing with Ecology to ensure the package is adequate in order to maintain vessel alterations schedule.

Preparations for benchmark testing the Low Order Accumulation Model (LOAM) for application to the 5 non-Newtonian vessels are ongoing. The readiness of the test platform and sparger installation is nearing completion. Benchmark testing will commence in November 2010, and will be complete in December 2010.

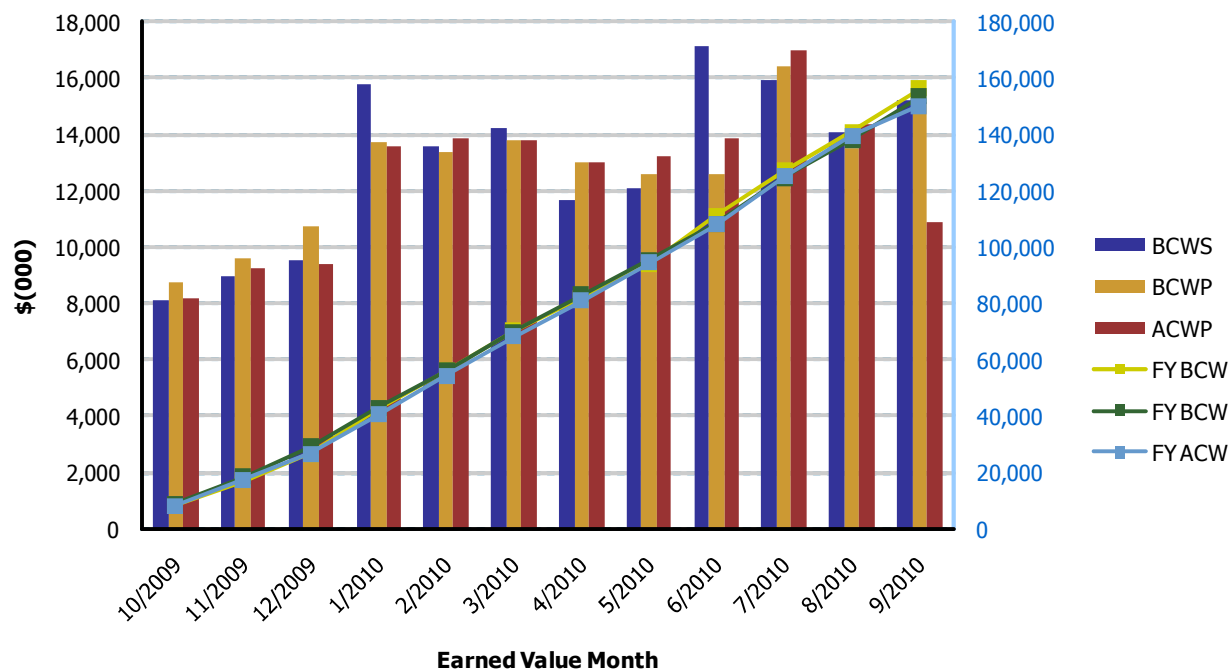
Resolutions of the major technical issues have been included in Forecast Update 4. DOE completed a review of the Forecast Update in October. Scoping details, including impacts to the project cost and schedule have been developed and efforts are underway to get them implemented into the project baseline by November.

Data Set: FY 2010 Earned Value Data

Data as of: **Sept 2010**Report Number: **EXC-01a**

**River Protection**  
**01-D-16E - Pretreatment Facility**

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2009	\$8,121	\$8,762	\$8,153	1.08	1.07	\$8,121	\$8,762	\$8,153	1.08	1.07
Nov 2009	\$8,991	\$9,625	\$9,213	1.07	1.04	\$17,112	\$18,387	\$17,366	1.07	1.06
Dec 2009	\$9,493	\$10,767	\$9,366	1.13	1.15	\$26,605	\$29,154	\$26,732	1.10	1.09
Jan 2010	\$15,776	\$13,724	\$13,599	0.87	1.01	\$42,381	\$42,878	\$40,331	1.01	1.06
Feb 2010	\$13,597	\$13,349	\$13,852	0.98	0.96	\$55,978	\$56,227	\$54,183	1.00	1.04
Mar 2010	\$14,245	\$13,801	\$13,823	0.97	1.00	\$70,223	\$70,028	\$68,006	1.00	1.03
Apr 2010	\$11,668	\$13,040	\$12,983	1.12	1.00	\$81,891	\$83,068	\$80,989	1.01	1.03
May 2010	\$12,117	\$12,562	\$13,231	1.04	0.95	\$94,008	\$95,630	\$94,220	1.02	1.01
Jun 2010	\$17,107	\$12,571	\$13,829	0.73	0.91	\$111,115	\$108,201	\$108,049	0.97	1.00
Jul 2010	\$15,888	\$16,448	\$16,954	1.04	0.97	\$127,003	\$124,649	\$125,003	0.98	1.00
Aug 2010	\$14,056	\$13,493	\$14,379	0.96	0.94	\$141,059	\$138,142	\$139,382	0.98	0.99
Sep 2010	\$15,241	\$15,171	\$10,909	1.00	1.39	\$156,300	\$153,313	\$150,291	0.98	1.02
PTD	\$1,055,904	\$1,065,039	\$1,033,481	1.01	1.03					

## High-Level Waste (HLW) Facility

### **D-00A-20, Complete Construction of Structural Steel to 14' in HLW Facility,**

Due: 12/31/2010, Status: Complete

### **D-00A-21, Complete Construction of Structural Steel to 37' in HLW Facility,**

Due: 12/31/2012, Status: On Schedule

The HLW Facility will receive the separated high-level waste from the Pretreatment (PT) facility. The concentrate is blended with glass formers and converted into molten glass in one of the two HLW melters and then poured into cylindrical stainless steel canisters. After cooling, the canisters are sealed and decontaminated prior to shipment to interim storage. The HLW Facility is 50% complete overall, with engineering design 86% complete, procurement 59% complete and construction 30% complete.

### **Significant Past Accomplishments:**

In October, engineering completed the review of the vendor's seismic analysis reports and design drawings for the C5V and PJV HEPA Housings. Senior seismic experts at BNI's headquarters completed the review of the analysis reports with additional reviews performed independently by BNI San Francisco office staff. Local WTP Site Engineering coordinated the review efforts. The HOP analysis reports will be received in November.

Construction forces completed three placements (nearly 500 cubic-yards of concrete) in October. The placements included slab 3008 at the 37-foot elevation, Melter Cave #1 slab 2027 at the 23-foot elevation, and wall 2130 spanning the 14-foot to 37-foot elevations at the far south end of Melter Cave #2. The 37-foot elevation slabs in the Annex area are all complete and construction continues strong progress on the installation and fire proofing of the 37-foot to 58-foot Annex structural steel.

### **Significant Planned Actions in the Next Six Months:**

- Complete 90% release of piping for fabrication (12/2010)
- Commence installation of duct, pipe, and support steel in the Filter Cave (01/2011)
- Complete Civil, Structural, and Architectural Title II Design Contract Milestone (02/2011)
- Receive initial delivery of C5V HEPA Filter Housings (02/2011-03/2011)
- Commence roofing of Annex (03/2011)
- Receive Canister Decontamination Vessels (04/2011)

### **Issues:**

The build-out of the Filter Cave is on the primary critical path schedule for the HLW Facility. The complicated installation of the support steel, housings, dampers, large diameter ducting, and piping requires detailed coordination. BNI is holding weekly interface meetings between WTP construction craft and the ventilation subcontractor to optimize the sequencing and schedule. The housings and dampers are on-schedule to support the construction need-dates.

The procurement and fabrication of vessels is also receiving focus and priority. Design impacts from the revised ground motion studies as well as more stringent quality requirements are being incorporated into the procurements. Management is monitoring progress weekly to ensure the vessels are delivered to support construction needs.



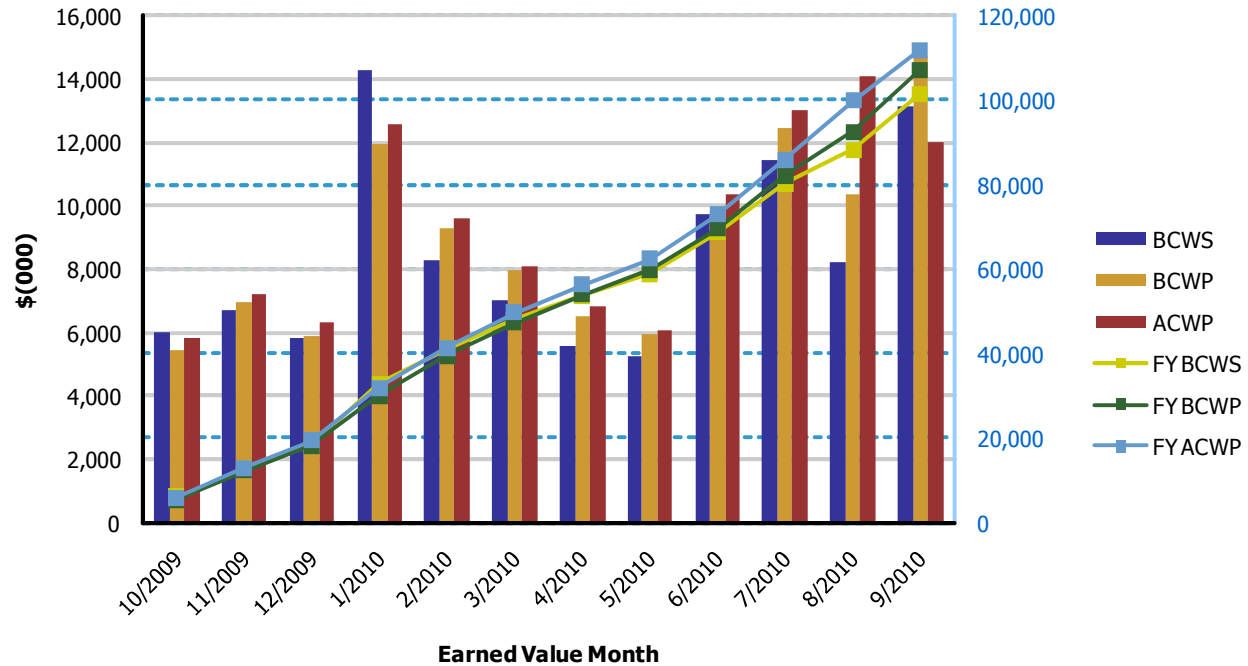
Data Set: FY 2010 Earned Value Data

Data as of: Sept 2010

Report Number: **EXC-01a**

**River Protection**  
**01-D-16D - High-Level Waste Facility**

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2009	\$6,029	\$5,415	\$5,799	0.90	0.93	\$6,029	\$5,415	\$5,799	0.90	0.93
Nov 2009	\$6,675	\$6,939	\$7,190	1.04	0.97	\$12,704	\$12,354	\$12,989	0.97	0.95
Dec 2009	\$5,810	\$5,887	\$6,316	1.01	0.93	\$18,514	\$18,241	\$19,305	0.99	0.94
Jan 2010	\$14,300	\$11,915	\$12,602	0.83	0.95	\$32,814	\$30,156	\$31,907	0.92	0.95
Feb 2010	\$8,283	\$9,263	\$9,594	1.12	0.97	\$41,097	\$39,419	\$41,501	0.96	0.95
Mar 2010	\$7,007	\$7,936	\$8,065	1.13	0.98	\$48,104	\$47,355	\$49,566	0.98	0.96
Apr 2010	\$5,555	\$6,519	\$6,811	1.17	0.96	\$53,659	\$53,874	\$56,377	1.00	0.96
May 2010	\$5,283	\$5,975	\$6,094	1.13	0.98	\$58,942	\$59,849	\$62,471	1.02	0.96
Jun 2010	\$9,717	\$9,820	\$10,355	1.01	0.95	\$68,659	\$69,669	\$72,826	1.01	0.96
Jul 2010	\$11,450	\$12,445	\$13,023	1.09	0.96	\$80,109	\$82,114	\$85,849	1.03	0.96
Aug 2010	\$8,199	\$10,341	\$14,057	1.26	0.74	\$88,308	\$92,455	\$99,906	1.05	0.93
Sep 2010	\$13,133	\$14,686	\$11,977	1.12	1.23	\$101,441	\$107,141	\$111,883	1.06	0.96
PTD	\$694,420	\$699,224	\$689,126	1.01	1.01					

## **Low-Activity Waste (LAW) Facility**

**D-00A-07, LAW Facility Construction Substantially Complete**, Due: 12/31/2014, Status: On Schedule

**D-00A-08, Start LAW Facility Cold Commissioning**, Due: 12/31/2018, Status: On Schedule

**D-00A-09, LAW Facility Hot Commissioning Complete**, Due: 12/31/2019, Status: On Schedule

### **Significant Past Accomplishments:**

The LAW Facility will vitrify low-activity waste from the PT Facility. Waste will be mixed with glass formers, vitrified into glass at an average daily rate of 30 metric tons, and placed in stainless-steel canisters that will be disposed on site in the Integrated Disposal Facility. Overall facility percent complete is 65%, engineering is 92%, procurement is 79%, and construction is 64%.

#### **Engineering**

Engineering issued confirmed calculations for the Environmental Qualification (EQ), the Pipe Sizes for LAW Secondary Offgas and Vessel Vent Process Systems, and the Submerged Bed Scrubber Chilled Water Heat Exchangers Sizing. Engineering also issued electrical grounding layout drawings. Engineering is still on track to complete LAW Confirmed design by September 2011.

#### **Procurement**

The shield lids for the two, LAW melters were received in October. The melters themselves will be delivered in November. Factory Acceptance Testing of the two, LAW autosamplers will also occur in November. Delivery of these is planned for December.

#### **Construction**

During October, BNI completed installation of the melter rail filler plate and the freight elevator platform. Construction continued to install the cooling panels on the walls of the pour caves. Construction is making preparations for receipt and storage of the LAW melters. Installation of the CO<sub>2</sub> pelletizers was initiated. Construction continued work on the normal activities such as installation of piping and hangers, cable tray, conduit and wiring, instrument enclosures, lighting fixtures, partition wall framing and gypsum wallboard, and perimeter sealants.

#### **Commissioning**

BNI Plant Operations met with Controls and Instrumentation (C&I) to discuss the LAW exhaust fans failure to automatically start back up after a loss of onsite power.

### **Significant Planned Actions in the Next Six Months:**

- Receive LAW autosampling (ASX) equipment
- Receive LAW melters and move into temporary storage at site
- Complete installation of LAW freight/personnel elevator

**Issues:**

No major issues.

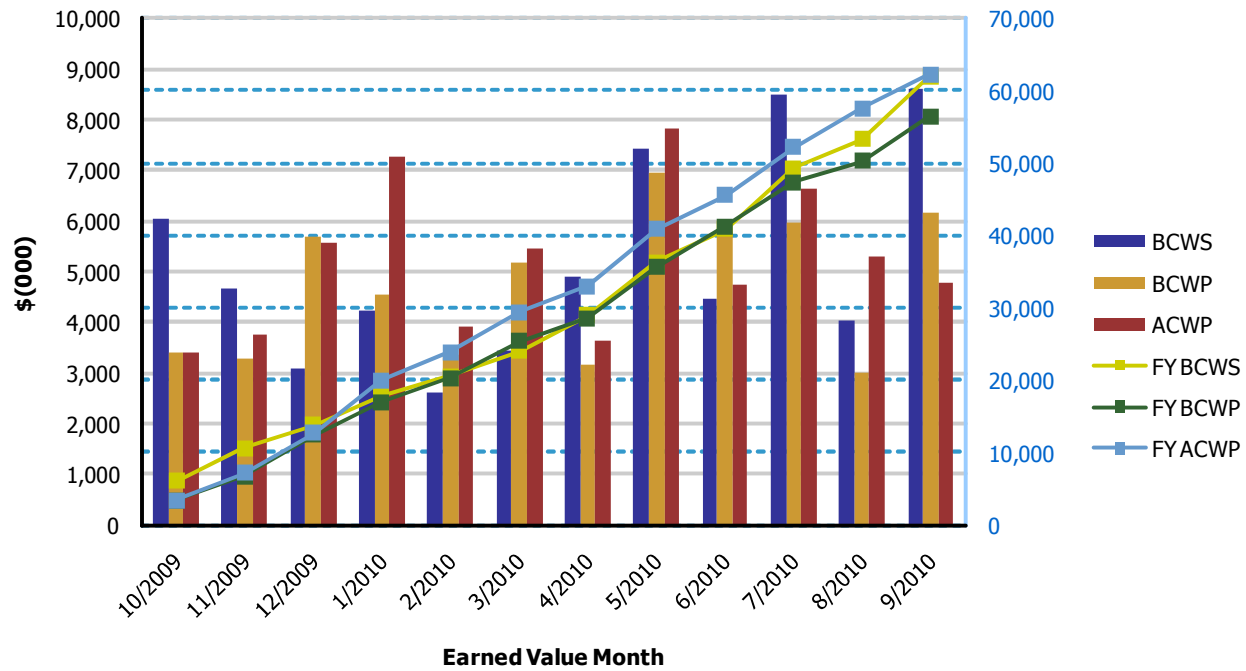
Data Set: FY 2010 Earned Value Data

Data as of: Sept 2010

Report Number: **EXC-01a**

**River Protection**  
**01-D-16A - Low-Activity Waste Facility**

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2009	\$6,032	\$3,420	\$3,401	0.57	1.01	\$6,032	\$3,420	\$3,401	0.57	1.01
Nov 2009	\$4,657	\$3,275	\$3,738	0.70	0.88	\$10,689	\$6,695	\$7,139	0.63	0.94
Dec 2009	\$3,082	\$5,679	\$5,577	1.84	1.02	\$13,771	\$12,374	\$12,716	0.90	0.97
Jan 2010	\$4,215	\$4,555	\$7,254	1.08	0.63	\$17,986	\$16,929	\$19,970	0.94	0.85
Feb 2010	\$2,618	\$3,342	\$3,910	1.28	0.85	\$20,604	\$20,271	\$23,880	0.98	0.85
Mar 2010	\$3,428	\$5,165	\$5,459	1.51	0.95	\$24,032	\$25,436	\$29,339	1.06	0.87
Apr 2010	\$4,901	\$3,170	\$3,651	0.65	0.87	\$28,933	\$28,606	\$32,990	0.99	0.87
May 2010	\$7,426	\$6,961	\$7,802	0.94	0.89	\$36,359	\$35,567	\$40,792	0.98	0.87
Jun 2010	\$4,472	\$5,749	\$4,758	1.29	1.21	\$40,831	\$41,316	\$45,550	1.01	0.91
Jul 2010	\$8,474	\$5,969	\$6,654	0.70	0.90	\$49,305	\$47,285	\$52,204	0.96	0.91
Aug 2010	\$4,037	\$2,990	\$5,296	0.74	0.56	\$53,342	\$50,275	\$57,500	0.94	0.87
Sep 2010	\$8,606	\$6,143	\$4,769	0.71	1.29	\$61,948	\$56,418	\$62,269	0.91	0.91
PTD	\$588,471	\$580,939	\$623,097	0.99	0.93					

## Analytical Laboratory

**D-00A-05, LAB Construction Substantially Complete, Due: 12/31/2012, Status: On Schedule**

### Significant Past Accomplishments:

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. Overall facility complete for LAB is 45%, engineering is 82%, procurement is 72%, and construction is 68%.

#### Engineering

In October BNI engineering issued control logic diagrams for the domestic (potable) water, plant vacuum air, steam condensate water, de-ionized water, and C1V ventilation systems to support control software development. In addition, engineering issued the confirmed calculation for LAB process and utility piping thermal and pressure cycles. The plant installed heating, ventilating, and air conditioning (HVAC) system software life-cycle document was also issued.

#### Procurement

No significant activity in October. All LAB autosampler receipt stations and fume hoods were delivered in August and September.

#### Construction

Major construction activities in the LAB during October were continued piping installation in the C2, C3, and C5 drainage pits, and continued progress on the installation of piping and hangers, conduit, lighting, and electrical equipment.

#### Commissioning

BNI LAB Plant Operations initiated work on the development of data quality requirements for WTP waste feed acceptance. This work is planned for completion in December of this year. BNI also continued work on the LAB administrative procedures.

### Significant Planned Actions in the Next Six Months:

- Install LAB waste drum bogie shield door
- Begin installation of LAB autosampling equipment
- Complete LAB C5 ventilation filter room ceiling design

### Issues:

No major issues.

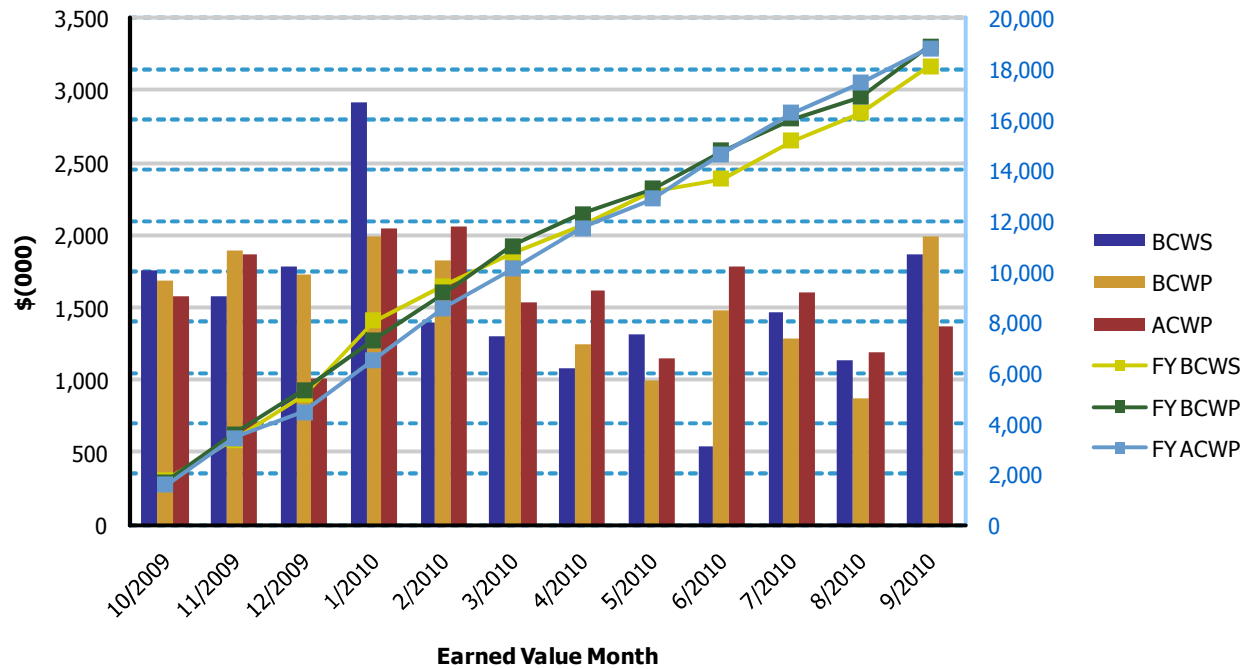
Data Set: FY 2010 Earned Value Data

Data as of: Sept 2010

Report Number: **EXC-01a**

**River Protection**  
**01-D-16B - Analytical Laboratory**

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2009	\$1,756	\$1,681	\$1,579	0.96	1.06	\$1,756	\$1,681	\$1,579	0.96	1.06
Nov 2009	\$1,583	\$1,896	\$1,864	1.20	1.02	\$3,339	\$3,577	\$3,443	1.07	1.04
Dec 2009	\$1,779	\$1,735	\$1,015	0.98	1.71	\$5,118	\$5,312	\$4,458	1.04	1.19
Jan 2010	\$2,916	\$1,993	\$2,040	0.68	0.98	\$8,034	\$7,305	\$6,498	0.91	1.12
Feb 2010	\$1,397	\$1,826	\$2,057	1.31	0.89	\$9,431	\$9,131	\$8,555	0.97	1.07
Mar 2010	\$1,296	\$1,881	\$1,539	1.45	1.22	\$10,727	\$11,012	\$10,094	1.03	1.09
Apr 2010	\$1,076	\$1,251	\$1,612	1.16	0.78	\$11,803	\$12,263	\$11,706	1.04	1.05
May 2010	\$1,309	\$992	\$1,145	0.76	0.87	\$13,112	\$13,255	\$12,851	1.01	1.03
Jun 2010	\$541	\$1,481	\$1,786	2.74	0.83	\$13,653	\$14,736	\$14,637	1.08	1.01
Jul 2010	\$1,471	\$1,280	\$1,606	0.87	0.80	\$15,124	\$16,016	\$16,243	1.06	0.99
Aug 2010	\$1,129	\$878	\$1,195	0.78	0.73	\$16,253	\$16,894	\$17,438	1.04	0.97
Sep 2010	\$1,866	\$1,985	\$1,367	1.06	1.45	\$18,119	\$18,879	\$18,805	1.04	1.00

PTD	\$153,215	\$152,387	\$164,678	0.99	0.93
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## Balance of Facilities (BOF)

**D-00A-12, Steam Plant Construction Complete, Due: 12/31/2012, Status: On Schedule**

### Significant Past Accomplishments:

BOF provides services and utilities to support operation of the main production facilities – PT, HLW, LAW, and LAB. Overall facility percent complete for BOF is 46%, engineering is 83%, procurement is 44%, and construction is 60%.

#### Engineering

Engineering completed control software development for the Ammonia Reagent (AMR) system and initiated testing of that software. Engineering also issued the confirmed calculation “*Piping Thermal and Pressure Cycles for BOF Utility Systems.*”

#### Procurement

The major focus has been on procurement of the Emergency Diesel Generators (EDGs). The recently received proposal is under review and analysis prior to awarding a contract. The ammonia system vaporizer skid calculations are progressing with continued interactions of BNI Engineering with the vendor engineers to ensure approval. The CO<sub>2</sub> vessel factory acceptance testing was conducted in October - shipment to the WTP is expected in late November or early December.

#### Construction

BNI continued to make progress on the anhydrous ammonia storage facility (AASF) by installing formwork, rebar, bolts, and embeds, excavating for the electrical duct bank and piping commodities, and completing the installation of electrical conduit in the basement level. BNI is also continuing work on multiple construction activities in the Chiller Compressor Plant (CCP), Water Treatment Facility (WTF), Glass Former Storage Facility (GFSF), and the non-dangerous/non-radioactive effluent facility. BNI completed installation of the air-compressors at the GFSF and construction continues on the GFSF control building also.

#### Commissioning

BNI BOF Plant Operations completed resolution of control software issues associated with 1) low pump pressure alarm acknowledgment (when pump is not running) without operator action and 2) control valve positions and digital outputs (will control with operator faceplates). Plant Operations also completed evaluation and testing of the Radioactive Liquid Waste Disposal System (RLD) control software and the AMR system control software logic.

### Significant Planned Actions in the Next Six Months:

- Award EDG procurement
- Complete concrete placements for BOF Ammonia Facility
- Receive BOF ammonia vaporizer skid

**Issues:**

No major issues.



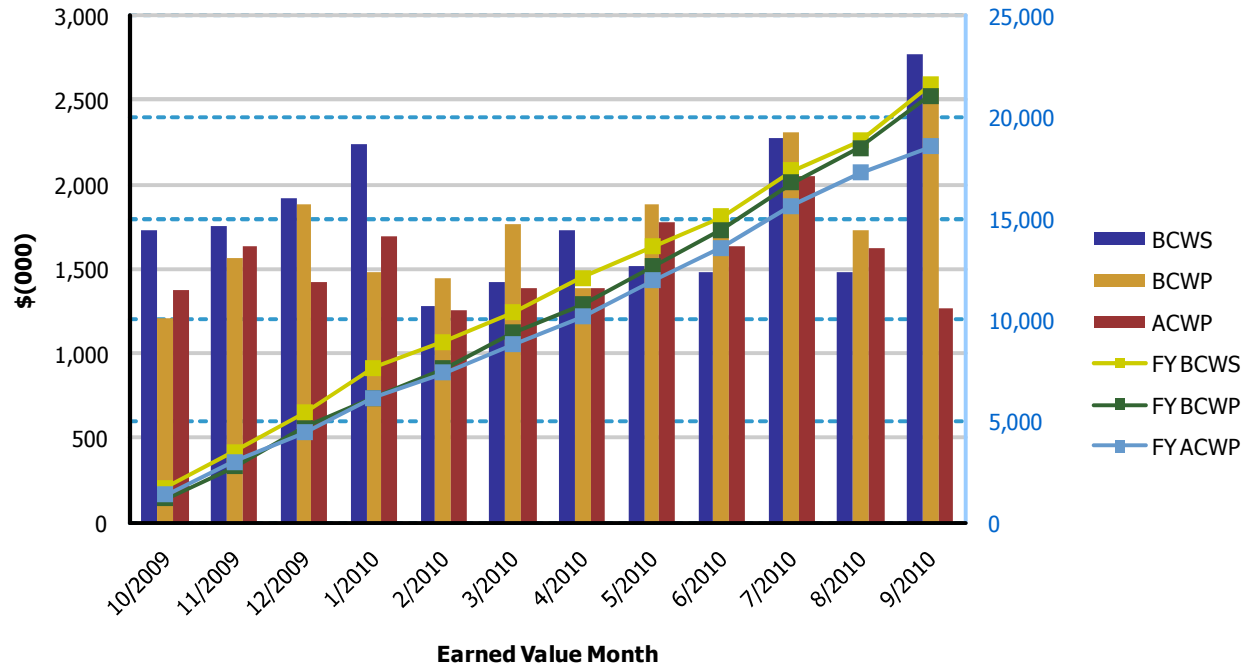
Data Set: FY 2010 Earned Value Data

Data as of: Sept 2010

Report Number: **EXC-01a**

**River Protection**  
**01-D-16C - Balance of Facilities**

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2009	\$1,733	\$1,205	\$1,374	0.70	0.88	\$1,733	\$1,205	\$1,374	0.70	0.88
Nov 2009	\$1,752	\$1,567	\$1,636	0.89	0.96	\$3,485	\$2,772	\$3,010	0.80	0.92
Dec 2009	\$1,921	\$1,889	\$1,428	0.98	1.32	\$5,406	\$4,661	\$4,438	0.86	1.05
Jan 2010	\$2,233	\$1,482	\$1,700	0.66	0.87	\$7,639	\$6,143	\$6,138	0.80	1.00
Feb 2010	\$1,279	\$1,442	\$1,258	1.13	1.15	\$8,918	\$7,585	\$7,396	0.85	1.03
Mar 2010	\$1,426	\$1,771	\$1,383	1.24	1.28	\$10,344	\$9,356	\$8,779	0.90	1.07
Apr 2010	\$1,733	\$1,387	\$1,382	0.80	1.00	\$12,077	\$10,743	\$10,161	0.89	1.06
May 2010	\$1,519	\$1,889	\$1,777	1.24	1.06	\$13,596	\$12,632	\$11,938	0.93	1.06
Jun 2010	\$1,481	\$1,800	\$1,630	1.22	1.10	\$15,077	\$14,432	\$13,568	0.96	1.06
Jul 2010	\$2,280	\$2,314	\$2,055	1.01	1.13	\$17,357	\$16,746	\$15,623	0.96	1.07
Aug 2010	\$1,480	\$1,733	\$1,619	1.17	1.07	\$18,837	\$18,479	\$17,242	0.98	1.07
Sep 2010	\$2,772	\$2,570	\$1,268	0.93	2.03	\$21,609	\$21,049	\$18,510	0.97	1.14
PTD	\$235,194	\$234,367	\$231,914	1.00	1.01					

Waste Treatment Plant Project - Percent Complete Status Through September 2010												
(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars		
Facilities	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete
Low-Activity Waste	892.2	580.9	65%	212.0	195.1	92%	234.1	185.2	79%	305.4	194.8	64%
Analytical Lab	335.8	152.4	45%	50.2	41.0	82%	56.9	41.1	72%	86.7	59.3	68%
Balance of Facilities	509.1	234.4	46%	70.1	58.1	83%	83.3	36.9	44%	221.1	132.1	60%
High-Level Waste	1,407.7	699.2	50%	322.3	278.5	86%	439.6	259.6	59%	521.1	157.5	30%
Pretreatment	2,265.4	1,065.0	47%	606.9	494.9	82%	642.9	286.3	45%	832.6	279.1	34%
Shared Services	4,665.4	3,003.6	64%	1,067.3	839.3	79%	462.5	317.0	69%	1,341.4	951.7	71%
Undistributed Budget	37.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Total WTP</b>	<b>10,112.8</b>	<b>5,735.5</b>	<b>57%</b>	<b>2,328.8</b>	<b>1,906.9</b>	<b>82%</b>	<b>1,919.3</b>	<b>1,126.1</b>	<b>59%</b>	<b>3,308.3</b>	<b>1,774.5</b>	<b>54%</b>

Source: WTP Contract Performance Report

*Note: Starting with the June 2009 report, facility Construction percent complete values decreased significantly, and a couple of Design/Engineering facility percent complete values went down as well. The decrease in values was tied to Phase I of BNI's elimination of WBS 1.08, Plant Wide EPCC; scope from WBS 1.08 was moved to facilities as appropriate or to WBS 1.90, Shared Services. This resulted in an increase in the facility construction budgets, which has correspondingly reduced the to-date percent complete values. In July 2010 the allocation of 1.90 to the facilities was removed to show true facility percent complete.*